COMMUNITY INVESTMENT TOOLS

Innovative Design and Development Codes

COMMUNITY INVESTMENT TOOLKIT

VOLUME 2

Metro

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Acknowledgments

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Toolkit

Regional choices for how we grow

In 1995 citizens of the region developed Metro's 2040 Growth Concept, a vision for how the region grows that is based on a set of shared community values identified through an extensive public process. These values have been reconfirmed over the years through public opinion research. The vision of the 2040 Growth Concept is to establish complete communities that include:

- safe and stable neighborhoods for families
- compact development that uses both land and money more efficiently
- a healthy economy that generates jobs and business opportunities
- protection of farms, forests, rivers, streams and natural areas
- a balanced transportation system to move people and goods
- housing for people of all incomes in every community.

The 2040 Growth Concept, an innovative blueprint for the future, is intended to guide growth and development. Ten urban design types are identified as the "building blocks" of the regional strategy for managing growth, as depicted on the map *(on page v)*. To ensure that existing neighborhoods remain largely as they are today, more intense development is called for in centers and along corridors. Regional and town centers provide commerce and local government services as well as urban amenities for neighboring residents. Corridors are major streets that are well served by transit.

Since the region endorsed the 2040 Growth Concept in 1995, updated population forecasts predict the region will grow even more rapidly than initially expected, bringing new opportunities as well as new challenges. More people and the accompanying needs for land to provide jobs and housing place a premium on the efficient use and redevelopment of urban land. Rising costs for public facilities and services further highlight the need for efficient use and reuse of the limited supply of land with existing access to urban services, including roads, sewers, transit and schools. An additional consideration is the aging of our population; as people get older, they often seek higher-density housing within walking distance of transit, retail areas and medical facilities. Metro's effort, "Making the Greatest Place," seeks to identify what we've been doing well in the region to achieve the vision of the 2040 Growth Concept, capitalize on our successes, and focus our efforts on where we need to do better.

Policy framework

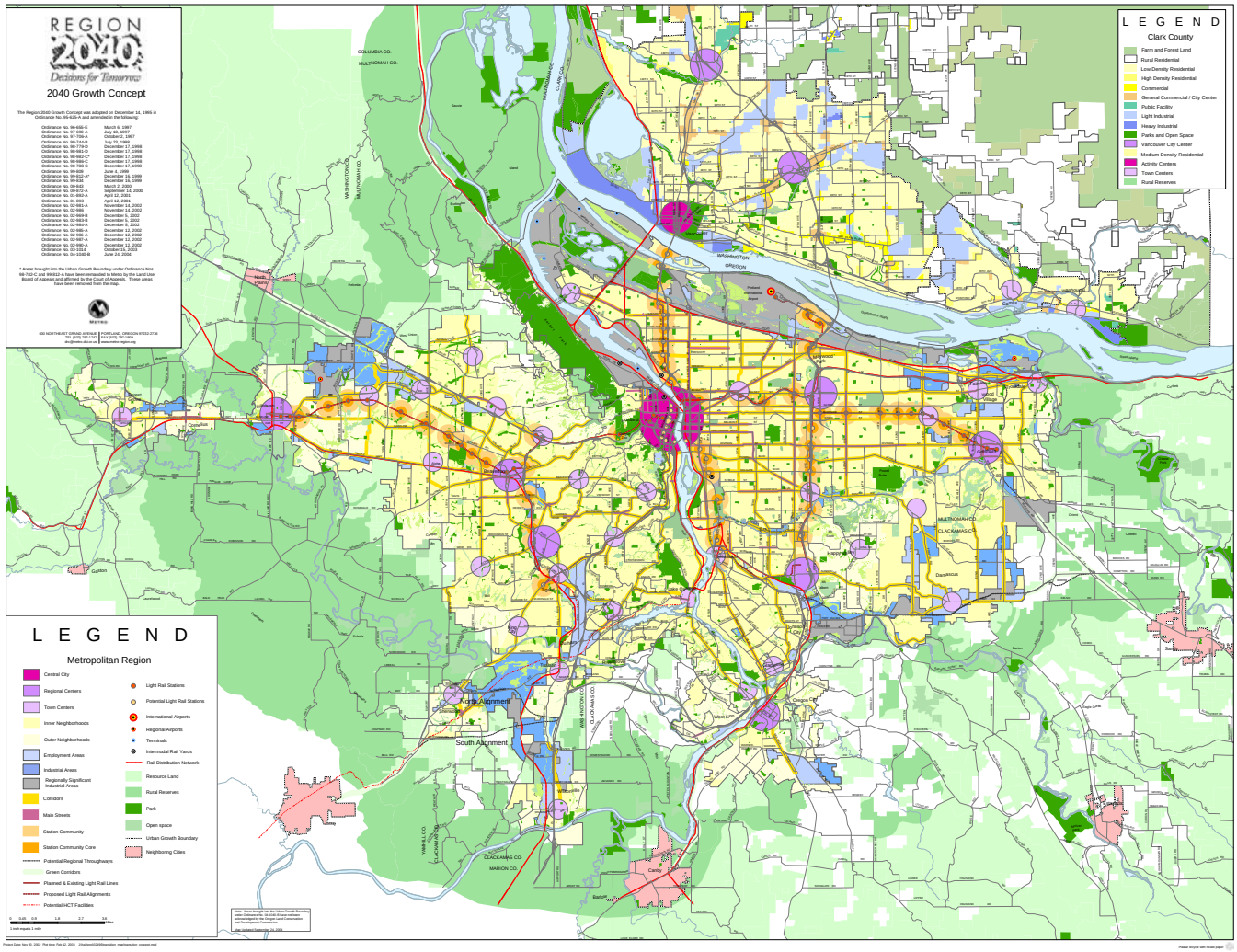
In 2006, the Metro Council and regional leaders developed a policy framework composed of four integrated elements that are intended to accelerate the achievement of the benefits envisioned in the 2040 Growth Concept. The policy elements are guided by principles stating that all regional growth and investment decisions should reinforce and support growth in centers, corridors and employment areas; that decisions to expand the boundary will balance urban needs with protection of agricultural and important natural areas; and that a collaborative approach is crucial to the successful implementation of the 2040 Growth Concept.

The four policy elements are:

1. Develop financial resources and other tools to support implementation of the 2040 Growth Concept.
2. Designate areas that will and will not be urbanized over the long term and coordinate growth with neighboring communities.
3. Base growth management decisions on urban performance.
4. Prioritize and invest in transportation improvements that support efficient development and strengthen the economy.

Investing in our communities

The first policy element is to focus efforts to stimulate investment in existing communities in a way that supports the regional vision. A key component is to develop strategies, partnerships and tools to best use the land in centers, along corridors and in



employment and industrial areas. There are many examples of successful public investment that has stimulated private development within the region and in our neighboring cities, including several communities around light rail stations, Lake Oswego's downtown and the South Waterfront area in Portland, to name just a few.

More than one million additional people are expected to live in the metro region in the next 30 years. Accommodating such growth while maintaining the quality of life residents expect will require substantial investment from the public and private sectors. Regional leaders have emphasized the importance of maximizing the land development potential in existing communities to help balance urban land needs with the importance of preserving land for the agricultural economy and retaining natural features.

The 2040 vision calls for growth to be concentrated in nearly 40 regional and town centers, along transit corridors, and in employment and industrial areas as an important strategy to maintain livable communities and support a strong economy. The benefits of developing in centers and along corridors include greater transportation choices, better air quality and more effective targeting and coordination of public investments. Mixed-use centers also maintain consistently high property values, create a sense of community and attract new businesses. Promoting redevelopment and well-designed residential development along major transportation corridors, which typically have good transit access and are often developed in low-density commercial uses, can provide similar benefits.

However, higher intensity urban development with the amenities that allow for an enhanced quality of life and redevelopment of underused urban land sometimes requires a higher initial investment than traditional greenfield and suburban development. Creative solutions are needed to help cities work with developers and lenders to achieve the types of development that enhance our communities as the region grows.

Toolkit for investing in our communities

Metro's Making the Greatest Place Initiative seeks to identify proven strategies and tools that can be used to stimulate investment in the region's centers, corridors, employment, and industrial areas to implement the 2040 Growth Concept. The strategies address:

- financial incentives
- urban design and local zoning and building codes
- employment and industrial areas.

The toolkit provides local governments, developers, nonprofit organizations, property owners and investors with important information, considerations and local perspectives for the various investment tools in the region. By highlighting the region's success stories, the toolkit shares these successful approaches across the region, demonstrates how these strategies are achieving results and serves as a guide for future investments. With technical assistance from Metro, this toolkit will help local partners overcome barriers to building vibrant downtowns and main streets and creating places for businesses to flourish.

The toolkit was developed through extensive research and collaboration with representatives from local governments, nonprofit organizations and stakeholder groups, as well as developers, investors and citizens through advisory committees and public forums.

Achieving the benefits envisioned in the 2040 Growth Concept relies on initiative by local leaders and governments. Metro and its partners will continue to build awareness of innovative and successful development strategies and work to provide technical assistance to local leaders and practitioners. Metro's technical assistance will help facilitate the use of new and existing fiscal tools and resources, modify local policies and broaden public awareness of these tools and policies and the potential benefits they bring for local community development. The toolkit is an integral component that complements this technical assistance. The toolkit supplies information and resources to help local communities achieve the benefits envisioned in the 2040 Growth Concept in a way that best fits their community needs.

Toolkit

Introduction

Innovative design and development codes: tools for investing in our communities

Innovative design and development codes provide tools to help promote vibrant communities throughout the region by reducing development costs for smart growth projects and providing the regulatory framework that enables the types of development that are desired and appropriate in different areas. Increasing public and private investments in our centers and corridors should be accompanied by new approaches to design and development codes. Each of the region's town centers and regional centers, main streets and station communities has a

unique identity. For this reason, public regulation and investment tools need to focus on urban form and a sense of place, protecting what makes these areas special.

Mixed-use, pedestrian-oriented development projects built around special places typically require a much higher up-front cost, resulting in more risk to investors and developers regardless of impressive mid- and long-term returns. Design and development codes can unintentionally create additional barriers and financial costs to developers building projects in these locations. By reducing these barriers and creating innovative design and development codes that respond to the unique conditions of centers and corridors, local governments can provide the framework to reduce a project's financial gap and encourage desired developments in these areas.

Several innovative design and development codes exist in the region and across the country that enable efficient land use and support investment in centers and corridors. These tools focus on creating great places for people to live, work and play.

The model approaches for implementing the tools included in this toolkit are:

- transitions from suburban style development to walkable urban style places, including how to phase these changes over time
- code flexibility to support building design that fits in the existing neighborhood context and improve the relationship between buildings and areas of different scale
- managing parking to maximize and support urban form
- visualize zoning to improve policy decisions and facilitate developer and neighborhood understanding
- creatively involve neighborhood residents and community leaders in the planning and development process.

This toolkit highlights the use of these tools in the region and illustrates the issues and considerations that arise from their use. Each city and county in the Metro region faces different political, regulatory and financial situations and will need to assess which tool, model approach or combination can best stimulate investment in their community. Thus, the toolkit also examines the flexibility and applicability of each of the tools to the different types of cities and counties in the region.

It can be complicated to develop compact, mixed-use projects, particularly due to the high cost to achieve vertical mixed-use development in locations that do not have similar development types and the land values that support them. This can be compounded by design and development codes that prohibit certain types of buildings, create disincentives, increase costs and limit flexibility for development in centers and corridors that focuses on urban form and the characteristics that make these places special. The innovative design and development codes described in this volume of the toolkit can help reduce these barriers. Often several tools and model approaches need to be combined in order to achieve desired results. Furthermore, these approaches may need to be used in conjunction with financial incentives such as urban renewal, special tax credit programs and other strategies to achieve their full potential.

Metro provides several other technical and financial assistance programs that help overcome these barriers and offer assistance to local jurisdictions in developing innovative design and development codes. **Metro's Transit Oriented Development (TOD)** and **Centers Implementation program** has been providing both financial and technical assistance in various communities in the region. Metro's TOD/Centers program brings about the construction of "transit villages" and projects that concentrate a mix of retail, housing and jobs in areas around transit lines and in regional and town centers. Metro's TOD/Centers staff works with local government staff and developers to make complicated projects work, which often results in identifying and helping to resolve local design and development code barriers. Examples of projects that have utilized this program include North Main Village in Milwaukie and the Crossings in Gresham.

Metro's Livable Streets program, part of Regional Transportation Planning, has published three handbooks that provide practical step-by-step methods for designing safe and healthy city streets. This supports implementation of the region's 2040 Growth Concept by providing tools to better integrate street designs with nearby land uses and create an environment that is not only attractive but can slow traffic and encourage walking, bicycling and use of transit. The handbooks also provide information about designing green streets in order to limit stormwater runoff and protect stream habitat. These design guidelines help our local communities enhance livable streets in their centers, corridors and throughout their neighborhoods.

Metro's Nature in Neighborhoods program offers technical and financial assistance programs to restore and enhance natural features in communities which includes encouraging the implementation of innovative design and development. The program

Tools for investing in our communities

funds projects that connect citizens to their watersheds through hands-on restoration activities and environmental education. It also provides capital grants for projects that re-green and re-nature neighborhoods, and it provides educational information about nature-friendly development practices that benefit the environment and local businesses. **Integrating Habitats**, a design competition hosted by Nature in Neighborhoods in 2007 and 2008, called for innovative, visionary development practices that balance design excellence, ecological stewardship and economic enterprise. As a result, over 100 designs are available that illustrate ways to better balance development, human needs and the health of natural systems.

In a coordinated effort with public agencies and business organizations, Metro's **Regional Travel Options** program promotes and supports the transportation choices available in the region to reduce the number of drive alone trips. Metro's web site provides a guide to the many travel options available in the Portland-Southwest Washington metro region, including public transit, walking, biking, and ridesharing in a carpool or vanpool. **Drive Less/Save More** provides tips and tools to help save money on gas by reducing trips and driving more efficiently. This resource can reduce the number of vehicles on the road and therefore, cut vehicle emissions, decrease congestion, reduce the demand for parking, extend the life cycle of existing roadways and promote healthier communities throughout the region. This enables more compact, vibrant design and development particularly in the region's centers and corridors.

These successful examples led to the following recommendations to enhance investments in our communities and better achieve the goals of the 2040 Growth Concept for development in centers and corridors:

- Continue using these tools to encourage compact, mixed-use development and modify local regulations as needed.
- Increase the use of these tools as an inter-related package, particularly as illustrated by the model approaches and in conjunction with the application of financial incentives in order to maximize their effective use.

- Consider collaborating with other local governments, service providers, community leaders, private-sector organizations and other interested parties to explore statutory changes, state and regional regulatory changes or regional service programs that will make these tools work even better, particularly in the following areas:

  - Consider modifying Planned Unit Development (PUD) provisions in order to take advantage of the flexibility of PUDs in centers and corridors. Recommendations include making PUDs more applicable to smaller sites and allowing all types of housing and mixed-uses in these areas. In addition, consider applying PUD provisions by right to development projects in centers and corridors and select areas at the perimeter that are in need of better-designed transitions.

  - Assess the regional parking requirements in Metro's Urban Growth Management Functional Plan's Title 2 and determine if new regional requirements are warranted to further reduce barriers to redevelopment in areas served by transit. Some town centers in the region have found the local parking supply to be much greater than the demand. In addition, a consistent barrier to redevelopment is the high price of providing parking in areas with lower land values. Establishing a limit on the number of parking spaces can be an important tool to foster mixed-use development in areas with high land use values, viable buildings, and a strong transportation system.

  - Investigate the potential for implementing a quick response program in the region that addresses neighborhood concerns and issues regarding infill development. The program could offer a neutral party to provide design assistance, help resolve conflicts and develop better design solutions.

Toolkit

Innovative design and development codes

Transitions

- Public realm transitions
- Density and use transitions

As city centers and corridors begin to change from more suburban development patterns to a more compact, urban, pedestrian-oriented character, cities and counties are struggling with the best way to gracefully achieve this physical transition. Issues arise as to how to increase densities over time, how to build transit-oriented design in infill areas and how to address the transition areas between more suburban and urban zones. Throughout the region, communities need to know how to best facilitate and accomplish this transition.

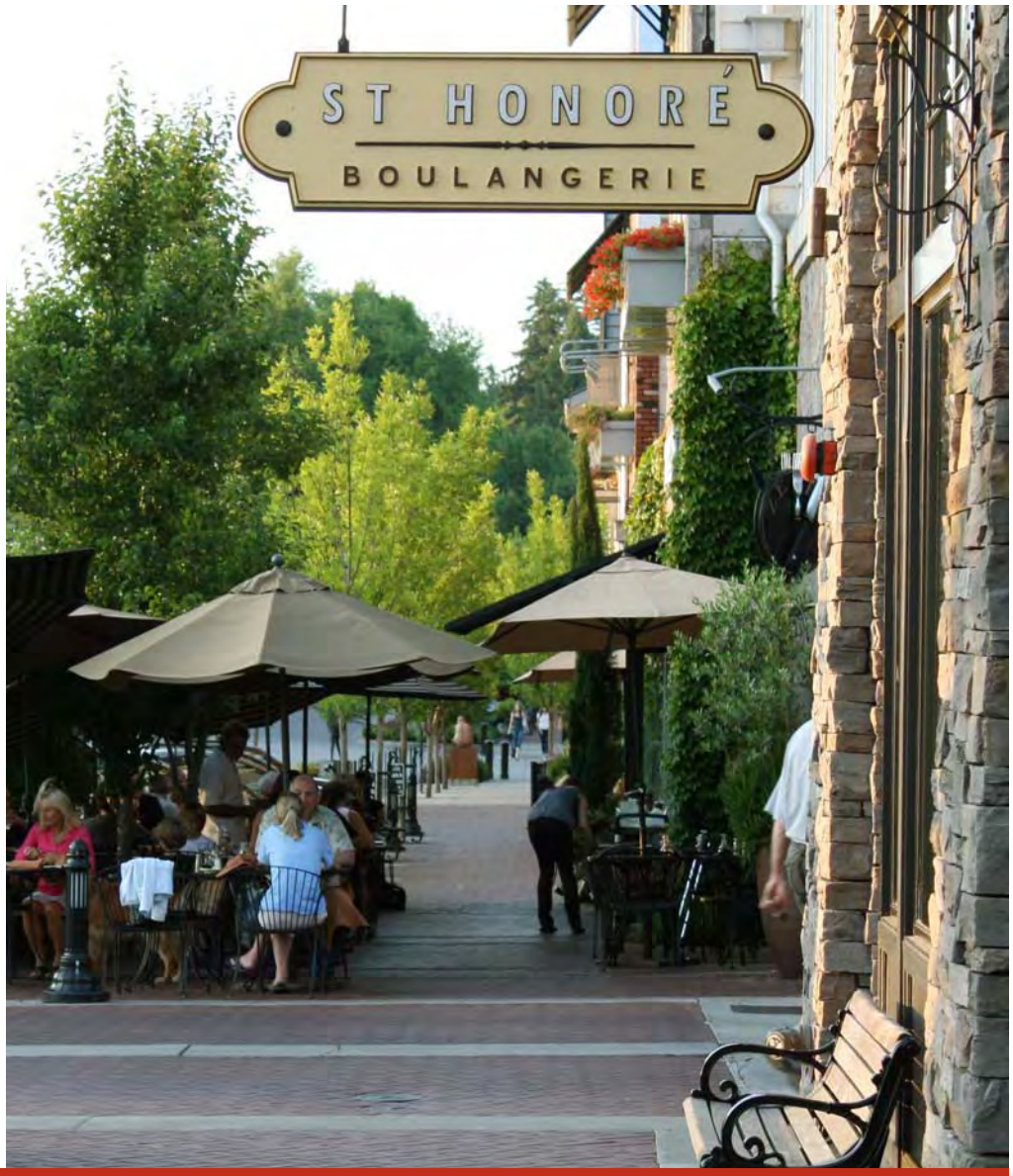
The various centers and corridors in the region have distinct identities, historic buildings and established development patterns that create main streets and commercial districts with a unique sense of place. For these areas to make the transition to higher densities and a mix of uses, the best approach is usually to expand upon the historic patterns of growth. However, a number of the region's designated growth areas are more suburban in nature, including light rail station areas and single-use districts like shopping malls. Making the shift from undifferentiated sprawl that is automobile-dominated and dependent on single-use strip-style development to more compact, pedestrian-friendly urban forms is a substantial shift in the appearance and use patterns of these places.

This chapter covers two different types of transitions experienced in communities. The first type is about physical transition: how to make the physical change from a single-use, low-density pattern to a mix of uses and densities. The second type is the transition that takes place over time: how to accommodate or phase in urban development. Both types of transitions are currently addressed by zoning. However, zoning is static, and it does not typically change in response to the market by allowing or requiring different land uses as the market evolves. Local governments can include provisions in their zoning codes that adapt to the evolution of the market.

The best solution to facilitate the transition to more urban and active streets and development patterns is to combine regulations with development incentives. This approach is powerful when combined with funding tools such as urban renewal and business improvement districts to leverage investments in the public realm that can help attract and shape development.

Ground-floor requirements and retail incentives have activated the downtown district in Lake Oswego

Photograph provided by SERA



Toolkit

Innovative design and development codes

Public realm transitions

Suburban environments typically lack higher levels of density that generate street-level pedestrian activity found in more urban environments. The region's centers and corridors provide a prime opportunity to transform auto-oriented landscapes into more pedestrian-scaled, urban environments with a vibrant mix of uses. Key to this transition is creating a network of active, walkable streets that are connected physically and have similar visual components. The public realm is the environment experienced by any visitor to a specific place, the area between private buildings including the street, sidewalks and any public amenities such as plazas or benches. Improvements to the public realm that complement private improvements help make great urban spaces that define a place while improving safety and encouraging redevelopment.

The nuts and bolts

Codes and regulations that offer more flexibility, adapt to the market, focus on design, and offer incentives help ease the transition in the public realm. However, these improvements to the public and private realm cannot be achieved simply through regulation. It is difficult to attract the desired higher density development and mix of uses that support more urban streetscapes until the market it is ready. Even with a codified long-term vision, permissive land use zoning and required ground-floor development, such a transition cannot often be supported economically in the short-term because an increase in land values is needed to drive dense, mixed-use redevelopment projects. This challenge of transforming commercial areas into pedestrian-friendly districts is heightened if cities lack the funds to invest in the public infrastructure of sidewalks and streets. Therefore, local governments should complement model code approaches with financial incentives in order to change the physical form of the buildings at the ground-floor, street and sidewalk level, which can build a foundation for long-term market growth.

How to use it:

Ground floor design and development standards: Standards can help shape pedestrian-friendly ground floor areas in new and redeveloped buildings. These often take the form of clear and objective requirements that guide how a site must be developed. Standards define allowed and prohibited uses as well as the basic parameters of the outside of the building, or the building shape. Typically they address some or all of the following: building height, setbacks, landscaping, lot coverage, floor area ratios, parking, building materials, building façades, semi-public spaces, entrances, ground floor façade transparency, weather protection, signage and lighting.

Existing use of the tool in the region: The City of Milwaukie applies ground floor design and development standards in its downtown. Washington County applies similar requirements in its transit station areas.

Ground floor active use provisions: Often local governments find that simply requiring active ground floor uses in specific zones or locations discourages development if the near-term market does not support such uses. In response to this problem, some centers within the region have begun allowing interim storefront uses. Other local governments have achieved success in combining incentives such as reduced parking requirements with design standards that encourage desired retail uses with a character appropriate to the local center or corridor.

Zoning codes that recognize the realities of the market and include provisions that support a long-term vision for an area or district provide a more informed approach. They can require spaces to be designed so that they can be adapted to active uses such as retail or commercial once the market is ready. These requirements seek to establish good “bones” for active uses including high ceilings, large floor plates, specific construction types and transparent faces of the building fronting on public spaces.

There is flexibility for local design preferences, but fire and safety requirements do impact the dimensions of these ground floor spaces. Specific ceiling heights must be met, with 12 feet and higher serving as the standard. Retail uses also require larger

Example approach

City of Lake Oswego

Ground-floor requirements and retail incentives

The City of Lake Oswego has successfully established active ground floor retail uses in its downtown district by making targeted public investments and leveraging their negotiating power. In 1986, the Lake Oswego Redevelopment Agency (LORA) adopted an urban renewal plan for the downtown district, making tax increment financing available for new downtown projects. LORA then negotiated with developers to require ground floor retail. The focus was on establishing traditional "boutique" type retail uses rather than service retail, such as hair salons banks and copy shops, which are encouraged above the ground floors of development or outside the downtown core.

Various incentives were also created to attract retail businesses to locate downtown. New retail uses locating in existing structures in downtown are not required to provide parking. Existing structures may also have new floors added without any additional parking requirements as long as the ground floor footprint does not increase. In addition, the city set design standards to create the desired downtown character and encourage ground floor retail uses. While the code does not explicitly prohibit non-retail uses from the ground floor, these standards help to foster an environment that is conducive to ground floor retail over other types of uses. For example, a minimum of 80 percent of exterior ground floor area abutting pedestrian ways must be a designated storefront with display windows and entry features. The design standards also require plantings, street furniture and art in order to attract shoppers, provide places for outdoor dining and social interaction and to facilitate the programming of events and activities such as concerts and farmers markets.

As development and redevelopment has occurred over the last decade, rents in the downtown district have subsequently increased to the extent that ground floor space is not as affordable for non-retail uses such as offices. In this way, market forces encourage non-retail uses to locate on the upper floors, while the ground floor is reserved for retail businesses that are typically able to pay higher rents.

Design standards create a desired downtown character in Lake Oswego

"Our codes help create a seamless pedestrian-oriented shopping experience at the street level. Required design elements help attract shoppers and facilitate social interaction and special events. It is integral not to skimp on quality, and design local streets as flexible rooms as these features add to the quality of life of downtown users."

– Robert Galante, Redevelopment Director, City of Lake Oswego

The nuts and bolts

footprints with specific depths of at least 25 feet in order to accommodate their operational and infrastructure needs. Additionally, requirements for fire separation and fire suppression should be coordinated with the building code.

Existing use of the tool in the region: The City of Portland has achieved success with pairing ground floor design and development standards with active use provisions. The city requires the ground floors of new buildings to be designed so they can be retrofitted later when the market is stronger while allowing an interim use to avoid empty storefronts.

Minimum floor area requirement: In areas served by transit, communities can support the public realm by setting minimum floor area requirements for active uses. Active uses can include household and group living, retail sales and services, schools and colleges, daycare facilities, industrial services, community services, medical centers and religious institutions. Areas with well-designed streets and sidewalks and a mix of active uses that are well served by transit can support a higher level of density as automobile trips are replaced by transit, bicycle and walking trips. Minimum floor area requirements paired with ground floor active use and build-to lot line requirements ensure that development supports an improved public realm.

Existing use of the tool in the region: The City of Portland applies minimum floor area requirements in tandem with ground floor active use provisions in the Central City District as well as the Gateway Regional Center and the Hollywood Town Center.

Bonus floor area: Incentives are powerful tools that can be applied to achieve desired forms of development. Within targeted areas, floor area bonuses may be offered for a variety of desired features such as residential uses, mixed-use projects, retail uses, sustainability measures or affordable housing, among others. As opposed to regulations that require certain features, this approach works with the market to provide incentives attractive to developers within a targeted area. If developers propose projects with the desired features, they are eligible for a larger floor area that can translate into higher potential profits.

Existing use of the tool in the region: The City of Portland has established a retail use bonus option, among other bonus floor area options, for the Central City Plan District. This tool has also been used in conjunction with the ground floor active use requirements as part of a regulatory framework to reinforce the continuity of active ground-level uses throughout the Central City to support a vibrant pedestrian-oriented urban district.

Flexible parking requirements: City codes in the region already contain minimum parking standards based on development type. To create an incentive for desired types of development, cities can allow flexibility in these requirements based on factors such as access to transit, presence of nearby complementary uses, expected demographics or auto ownership rates, or the implementation of programs to reduce the demand for parking. Providing parking is often the greatest single cost to developers for projects located in centers and corridors. By reducing this cost, cities can provide an incentive to developers to build projects in these or other designated areas.

Cities can give permitting authorities the discretion to reduce the number of required parking spaces based on the factors listed above or establish more specific criteria to allow reductions to the minimum allowed outright under the code. Similarly, cities can allow on-street parking spaces to count toward off-street parking requirements. To specifically address the need for more active uses and higher quality retail uses, local governments can remove parking minimums for active ground floor retail uses or allow existing buildings to be expanded without any increase in required parking.

Existing use of the tool in the region: The City of Lake Oswego has successfully used flexible parking requirements in conjunction with design standards as an incentive to attract retail businesses to the downtown.

Keep in mind

Public investments: Infrastructure investments made to create an attractive public realm and pedestrian-oriented streetscapes are powerful tools whose high associated costs may be justified given their potential ability to attract developers to centers and corridors. They provide a means for local governments to negotiate for attractive mixed-use buildings. Financial tools such as urban renewal and local improvement districts help fund these investments. Likewise, infrastructure investments needed to serve the redevelopment in these areas should be incorporated into local capital improvement programs and system development charges (SDCs) in order to finance these public projects.

Legal issues: Some local governments have required developers to complete public space improvements for redevelopment projects in infill areas. This requirement can create a barrier to development in centers and corridors that already have higher development costs. It can also provide an incremental approach to infrastructure improvements and may result in an incomplete system of improvements in the public realm. More so, it is difficult to determine which remodels or redevelopments should be required to pay for improvements to the public realm. Likewise, the larger public shares these public spaces and the benefits of an improved public realm. For these reasons, the approach of requiring specific development projects to subsidize these improvements has faced legal challenges. If these improvements to serve growth are calculated within SDCs, all development shares the benefits as well as the burdens.

Market flexibility: It is important to provide incentives such as waiving parking requirements or providing floor area bonuses in areas targeted for compact, mixed-use development where the market cannot yet support the desired development patterns. In areas where additional floor area may not provide an adequate incentive, local governments can determine locally appropriate incentives such as streamlining the approval process for building permits in order to be more effective. Likewise, accompanying regulations should include several code options of varying stringency to remain effective in a changing market (e.g. active use provisions). These options make it possible for any local government to target this approach to its local market and enforcement preferences.

Public-private partnerships: Communities can leverage urban renewal and development agreements as powerful tools to attract the desired types of development and achieve public realm improvements. Regulations and incentives alone may not lead to the type of desired downtown development and mix of uses. Negotiated developer agreements have the potential to provide the most leverage and can be the primary tool used during an initial downtown redevelopment phase. They should be combined with design standards in order to perpetuate the intended aesthetic and create an atmosphere that is desirable to retail uses. Urban renewal can also give local governments the power to negotiate such agreements with developers. Through tax increment financing, a local government can provide financial incentives and make public investments to attract desired development projects and additional public amenities.

Communicating development capacity: Bonus floor area provisions can hide the true total development capacity of a site. This can cause problems with the public when a developer applies for bonuses allowed by the code and as a result the project exceeds allowed building envelope parameters. Setting a maximum height or floor-area ratio that cannot be exceeded even when all bonuses are added helps to avoid this problem.

Example approach

City of Portland

Ground floor requirements

To reinforce the continuous pedestrian activity along major transportation corridors throughout its Central City Plan District, the City of Portland established a zoning code provision to support the development of active ground floor uses and maintain a healthy urban district. The provisions of the code are designed to support the development of active uses, including lobbies, retail, residential and commercial uses.

Design standards encourage the development of ground floor spaces that can accommodate a number of different types of use and can be retrofitted over time in order to avoid empty storefronts. These regulations include height and building depth requirements that ensure spaces can accommodate single or multiple tenants. Street facing façades are required to include windows and doors or be structurally designed to allow the addition of windows and doors when the space is converted to active uses. In addition, ground-floor spaces are required to meet construction type and fire, life and safety requirements.

In addition to the provisions for active ground floor use, Portland has established other regulations and incentives along transportation corridors served by transit to encourage a higher level of activity and intensity. For example, minimum active floor area regulations require that when a site is within 200 feet of a streetcar alignment, active uses must occupy at least half of the floor area. These requirements are also in place in other plan districts in the city targeted for transit-level densities.

Furthermore, sites in the center of downtown that commit at least half of the site to retail space can qualify for a bonus floor area. Bonus floor area is earned in a 1-1 ratio for each floor area of retail space beyond the threshold. Any space dedicated to retail use under this provision must be preserved long term. This is accomplished by recording the use of the provision in a covenant between the property owner and the City that is attached to the property's deed.

This combination of different strategies to achieve desired forms has proved more successful than the previous Required Retail Opportunity Area code, which was overly prescriptive, inflexible and difficult to implement.

Design standards encourage active ground floor use, City of Portland
Photograph provided by Michael Mathers

Design standards encourage the development of ground floor spaces that can accommodate a number of different types of use and can be retrofitted over time in order to avoid empty storefronts, while still encouraging compact mixed-use development.

Putting it together

Local governments should use a holistic approach to applying these tools in order to implement a model approach and achieve desirable results for transitioning the public realm. Regulation alone cannot ensure results toward a center's objectives given the role that the market plays in determining land values and subsequent development proposals. Financial and regulatory incentives take these economic realities into account and attempt to make development in designated centers more attractive from a financial perspective.

Tips for implementation

- Determine the largest stumbling blocks to development in the area and develop incentives to help overcome these and bridge lower land values.
- Develop design standards and guidelines to shape a vision for development over the long-term that can guide future regulations and incentives.
- Develop an approach that combines multiple regulations and incentives to activate ground-floor spaces over the long-term.
- Require ground floor designs to be adaptable so that they can be retrofitted to active uses as the market develops.
- Develop a more equitable long-term approach to funding improvements in the public realm. Consider funding opportunities such as SDCs, urban renewal, and improvement districts.
- Determine the extent and nature of the transportation network serving a targeted town or regional center. Areas must be transit rich in order to support higher densities of the retail or commercial uses that will activate the street at the pedestrian-level.
- If transit resources are not available, partner with regional transit authorities to improve existing resources or target the area for additional resources.
- Consider establishing an urban renewal district as this designation allows a city or county to use a powerful financing tool to facilitate the physical transition of suburban areas to thriving town and regional centers.
- If utilizing urban renewal, use this power to leverage additional requirements from developers in a development agreement.

The use of a developer agreement will help increase employment and housing units in the Clackamas Regional Center

Photograph provided by SERA

Toolkit

Innovative design and development codes

Density and use transitions

As centers and corridors grow and transition to more urban patterns of development, they face challenges with integrating mixed-use projects. Some of the regions's centers and corridors are struggling to integrate residential uses into auto-dominated, single-use districts in order to achieve more vibrant communities. Higher development costs are also associated with these types of projects since they require more complex construction than single-use, low-density developments. Given this higher cost of development and low land values that do not yet support higher densities in some of the regional centers, financing gaps often remain. This is a challenge that cities throughout the region are trying to understand and overcome.

The nuts and bolts

By simply rezoning to allow compact mixed-use development, and not taking additional steps to help encourage new development patterns, cities may still experience development without higher densities or a mix of uses. As a result, a large amount of multi-family housing may be developed, leaving little land to assemble for retail or employment development once a market has developed. Zoning codes that simply require mixed-use development often fail because they are not correlated with the market and do not reflect what can be built at a specific point in time.

New approaches have attempted to create mechanisms in local development codes that phase expectations and establish triggers or thresholds in order to make the codes more responsive to the market. For example, once a certain land value exists, higher levels of density are required; or in a single use retail area, once residential uses become feasible, housing is required. This tool is particularly helpful in encouraging the redevelopment of select sites with non-conforming uses that would not redevelop otherwise. These new code approaches, when paired with plan districts, urban renewal areas, and development agreements are some of the more effective tools that have been used to address these issues related to density and use transitions.

How to use it:

Non-conforming use provision: To attract redevelopment on a smaller, site-specific scale, cities can amend their zoning ordinances to adopt non-conforming use provisions. These code provisions allow a property with an existing auto-oriented use that would no longer be permitted in most centers and corridors to be continued if the property is redeveloped in exchange for increased density, a greater mix of uses, and high design standards. Recognizing and retaining the value of auto-oriented uses, including auto services and drive-throughs, is an effective strategy as long as it is paired with regulations that assure that the design fosters an urban mix and intensity of uses and form. This innovative approach recognizes that the redevelopment and design of the site may be more important than the allowed uses. This code-based approach can be implemented through development standards for base zones, plan districts or overlay zones for centers and corridors. This allows additional flexibility and provides incentives for redevelopment that do not currently exist in most designated town centers and corridors in the region. All jurisdictions can use this incentive to help redevelop any non-conforming auto-oriented or retail uses that are commonly prohibited in regional and town centers.

Existing use of the tool in the region: The City of Portland has successfully used this tool to leverage the market demand for non-conforming uses (such as bank drive-throughs), in order to achieve higher intensity mixed-use projects in its Plan Districts.

Development agreement: Development agreements are voluntary legal agreements between a city and a developer. Agreements are negotiated on a project-by-project basis. Local governments are able to negotiate specific public benefits such as investments in the public realm, creation of new open space, permitted densities or uses, responsibility for providing infrastructure and services, and maximum height and bulk for proposed structures. In exchange, developers receive increased certainty that their proposal will be approved if they provide the agreed-upon features.

Development agreements can include a mix of incentives and requirements to reach desired outcomes. These agreements can provide a higher level of specificity and "teeth" for the implementation of development plans and improvements than plan and code language can achieve. However, there must be consistency and support in the vision and framework of the local comprehensive plan and development code for the terms being forged in the development agreement. Development agreements and intergovernmental agreements are applicable at various scales.

Development agreements are powerful tools to address the transition of large suburban sites into communities that are more urban in nature. For example, a development agreement can require that the developers of a property provide a desired mix of uses. However, if the market does not yet exist for certain uses, the public entity can allow some initial development to occur while requiring the developer to conduct a market study at specified intervals to determine when additional use requirements and future development standards should be applied.

Existing use of the tool in the region: Clackamas County has seen some success in using a development agreement to insist on a desired mix of uses in the recent redevelopment of the Clackamas Regional Center from a suburban mall to a regional center. The county had more leverage in its negotiations given the urban renewal financing already in place.

Keep in mind

Financial incentives: Local governments with urban renewal authority will be in a better position to negotiate favorable development agreements. Having urban renewal financing in place can afford municipalities more leverage with property owners.

FAR considerations: Floor area ratio (FAR) is a formula that most codes use to indicate total development capacity on a site. It can be very useful in comparing development capacity and to quantify and negotiate incentives and bonuses with developers. However, in the interest of making codes easier to visualize, FAR can also be represented with building envelope parameters such as setbacks, height and site coverage. Codes can express development capacity in both ways, making them easier for everyone to use.

Market dynamics: Allowing redevelopment of non-conforming uses such as auto-serving businesses and drive-throughs within areas targeted for more compact development takes advantage of market dynamics. Communities can use this as an incentive to attract redevelopment projects and private investment. If these uses are prohibited in more zones throughout the region, sites with existing drive-through facilities, for example, will become more valuable, particularly on streets with high traffic volumes and good visibility. Regulations requiring a higher FAR on the site are needed for this approach to work, creating a mutual benefit to the developer and local community. These minimum FAR levels and required residential uses need to be tailored to the specific community and its market.

Achieving mixed-use: In most centers and corridors, amending regulations to allow a mix of uses in conjunction with providing incentives that take advantage of market trends to attract desired development is the best approach. However, there are sites or areas where requiring a mix of uses may be appropriate. Local governments can use regulations and development agreements to require a mix of uses as the local market matures. In some cases it is important to preserve land for higher intensity, mixed-use development, waiting until the market evolves rather than allowing development to occur at a lower intensity. Examples of these types of places include critical sites next to transit routes or at the 100 percent corner of a center or corridor, meaning a focal point of a center or corridor that is surrounded by a mix of active uses. In these cases, prescriptive requirements for a mix of uses or for a certain number of residential units may be appropriate.

Cost: Non-conforming use provisions are cost-effective tools for communities that do not have urban renewal. Development agreements or the use of urban renewal may require a larger public investment. Local governments that can combine these tools will have the greatest ability to affect the transition from suburban to urban form.

Identifying transit opportunities: Transit is key to achieving the suburban to urban transition. Areas that are well served by transit can support a higher level of density since automobile trips are replaced by non-auto trips and land for parking is freed up for development. Therefore cities and counties should identify opportunities and sites for transit facilities in local center and corridor plans. Working with TriMet and Metro in this planning process will help determine the most effective locations and ways to integrate these facilities into the local fabric. This will help ensure these areas can function as vibrant centers and corridors.

Example approach

Hollywood and St. Johns Centers

Non-conforming use provision

In most town centers, a new or redeveloped drive-through facility would not be permitted. In the Hollywood and St. Johns Plan Districts the City of Portland has sought to encourage the redevelopment of sites with existing drive-through facilities by allowing them to continue as a non-conforming use as long as new redevelopment meets minimum FAR levels and residential uses. The intent of these plan district standards is to provide some flexibility for redevelopment and avoid the loss of a potential project due to the value associated with maintaining drive-throughs since they are a non-conforming use.

The FAR requirements provide for the more intense development with an urban character appropriate for a town center. These standards also allow the city to ensure drive-through redevelopment projects remain consistent with the overall intent of the center or district plan. Portland initially included a "sunset" provision for use of the drive-through regulations in the Hollywood Plan District. However, the sunset provision was later removed from the regulations.

In the Hollywood District, a full block with a Washington Mutual Bank (and drive-through) is being redeveloped into a mixed-use project that will include a Whole Foods Grocery, housing, structured parking and a bank with drive-through facilities. The drive-through provision was critical to this development as the bank saw this as a key business feature. Since they are utilizing the drive-through provision, the development is required to have an FAR of at least 1.5-to-1 and must include 25 percent residential uses. Plans for the development reflect an FAR of closer to 3-to-1. Additionally, the residential component allowed the developer to use the bonus building height provision, which brought the maximum allowable building height to 65 feet, rather than 45 feet.

Existing bank drive-thru use (above) being redeveloped in the Hollywood District (right) using Portland's non-conforming use provision

Image provided by Gerding-Edlen

The intent of these plan district standards is to provide some flexibility for redevelopment and avoid the loss of a potential project due to the value associated with maintaining drive-throughs since they are a non-conforming use.

Putting it together

Model code approaches that are flexible to the market and establish phased development requirements encourage redevelopment today while remaining consistent with the long-term vision for centers and corridors. This tool is particularly helpful in encouraging the redevelopment of select sites with non-conforming uses that would not redevelop otherwise. These new code approaches, when paired with financial incentives and development agreements, are some of the more effective tools to obtaining redevelopment that transitions in density and use over time.

These approaches do not require the setup or management of extensive programs or a significant amount of financial resources. Any local government can make slight modifications to its local development codes to offer these incentives and phased requirements.

Tips for implementation

- Target the application of non-conforming use code provisions throughout or within specific areas of local centers or corridors depending on where the vision calls for more development or focused redevelopment.
- Conduct stakeholder meetings to explore whether the opportunity to retain a drive-through or other auto-oriented uses as part of a redevelopment project would be attractive as an incentive.
- If non-conforming uses are hampering development in a particular center, identify all existing facilities, research how they are categorized under current code regulations (permitted, prohibited, legal non-conforming use, etc.), and evaluate the strength of the market for these existing facilities. Then identify the desired uses and minimum FAR for the sites based on current regulations and future aspirations.
- Create non-conforming use provisions that allow redevelopment if those desired development standards are met.
- Provide a clear record, or map, of the location of existing facilities or sites that are eligible to take advantage of the non-conforming use provisions.
- When able to use developer agreements in areas facing use and market transitions, require the inclusion of market studies in order to better respond to the market while maintaining requirements to meet the long-term vision.

Example approach

Clackamas County

Development agreement

In order to achieve the goals in the 2040 Growth Concept of developing the Clackamas Regional Center area as an urban regional center, the county is transforming the suburban mall into a mixed-use development with an urban form. The Clackamas Regional Center (CRC) area is projected to increase current employment and housing units to twice their existing levels. To achieve this large-scale transition of existing development patterns, the county augmented a plan and zoning district with developer agreements, urban renewal financing, agreements between the mall owner and TriMet, and plans for light rail transit. If used independently, these elements would not enable the scale of change that is envisioned.

Given that the mall and its surrounding area were in an urban renewal area, the County formed a development agreement in 2005 with the mall owner, General Growth Properties (GGP), for redevelopment of the property. The county committed through the agreement to provide parking and site improvements using expected funding from the urban renewal area. In return, the developer committed to building new commercial space and planned infrastructure projects. In addition, GGP committed to perform annual market studies to determine when the local market is ready for residential uses in the CRC. The county identified housing as an integral component to the long-term success of the urban regional center. Thus, once certain market conditions are identified, GGP is required to develop the residential component of the regional center's plan.

The county recognized that another key to achieving a vibrant urban center was providing regional transit. A partnership with TriMet resulted in the planning and design of a Clackamas Regional Center Station and Transit Center serving as the southern terminus of the proposed I-205 light-rail corridor route. Building off its pre-existing right to land and operations on mall property, TriMet formed an agreement with GGP for a 100-year lease of four to five acres for the planned MAX station and transit center. Costs for ensuring that the parking structure could be developed with a future second deck were split between GGP, TriMet and the county. GGP retained the air rights over the parking structure with the potential to develop a second floor of parking that would connect to an adjacent office or hotel development.

Clackamas Regional Center is being transformed into a mixed-use development with urban form

Photography provided by SERA

The county committed through the agreement to provide parking and site improvements using expected funding from the urban renewal area. In return, the developer committed to building new commercial space and planned infrastructure projects.

Resources

Public realm transitions

For more information on the example approaches, visit or contact:

Lake Oswego Redevelopment Agency
City of Lake Oswego
380 A Ave.
Lake Oswego, OR 97034
503-635-0235
Lake Oswego Community Development Code, Section 50.11
http://www.ci.oswego.or.us/plan/consolidated%20code/final/

City of Portland, Bureau of Planning
1900 SW Fourth Ave., Ste. 7100
Portland, OR 97201
503-823-7700
http://www.portlandonline.com/planning/
Central City Plan District, City of Portland Zoning Code, Chapter 33.510
http://www.portlandonline.com/shared/cfm/image.cfm?id=53363

Density and use transitions

For more information on the example approaches, visit or contact:

City of Portland, Bureau of Planning
For the Hollywood Plan District, Chapter 33.536, visit:
http://www.portlandonline.com/shared/cfm/image.cfm?id=53372
(See Section 33.536.210.D for regulations on Drive-Through Facilities)

For the St. Johns Plan District, visit:
http://www.portlandonline.com/shared/cfm/image.cfm?id=53424
(See Section 33.583.210 for regulations on Drive-Through Facilities)

Clackamas County Development Agency
9101 SE Sunnybrook Blvd.
Clackamas, OR 97015
503-353-4400
http://www.clackamas.us/transportation/renewal/
Clackamas County Comprehensive Plan, Chapter 10: Clackamas Regional Center Area Design Plan
http://www.co.clackamas.or.us/transportation/planning/comprehensive/10crc.htm

For more information on financial incentives for centers and corridors, including those listed above, please request

Metro's Community Investment Toolkit, Volume 1: Financial Incentives
Metro Planning Department
600 NE Grand Ave.
Portland, OR 97232
503-797-1839

Toolkit

Innovative design and development codes

Contextual design

- Code flexibility
- Transition zones

As the region's centers and corridors begin to transition from more suburban to urban forms, a mix of scales can result. A mismatch in urban scale can have a substantial negative impact on privacy, livability, real estate values and neighborhood character. Addressing neighborhood concerns in areas of redevelopment and transition can create an additional challenge. Most of the tools commonly used to address neighborhood concerns about a new development project sacrifice project design or density or result in dissatisfied neighbors. The key to creating high-

quality communities throughout the region is to develop graceful relationships between buildings and zones of different scales.

These relationships are particularly critical in corridors and centers and along edges adjacent to residential neighborhoods. If effective transitions are not made between buildings and zones of different scale, communities will risk losing the support of adjacent neighborhoods for intensifying development in centers and corridors. Conventional zoning functions fairly well in single-use zones. It is in more dynamic mixed-use zones where traditional zoning fails to regulate building form in a manner that eases transitions.

Traditional approaches to zoning apply a single allowed building scale uniformly across a specific area. Developments either meet minimum density requirements or they are not permitted. Zoning precludes flexible solutions such as different densities or approaches to height, bulk and massing (an approach to building design to reduce its apparent bulk by dividing it into smaller components) that would address the edge of the zoned area in order to respond to the context of the surrounding areas. As a result, redevelopment projects in centers and corridors face higher levels of scrutiny and site-specific design negotiations to ensure integration with surrounding areas, increasing costs to the project.

This chapter covers two approaches to achieve more attractive development relationships that improve the quality of centers and corridors as well as the surrounding neighborhoods. The first approach is building more flexibility into regulating codes in order to allow contextual responses that are more sensitive in their design to the existing forms in the neighborhood. The second approach is to use transition zones to create more gradual transitions in building form to ensure more attractive edges where centers and corridors meet single-dwelling neighborhoods.

New construction built to form-based code standards, City of Hercules, California

Photograph provided by Pacific Municipal Consultants

Toolkit

Innovative design and development codes

Code flexibility

One issue city planners face in establishing design and development codes is how to determine the appropriate amount of architectural controls. Oregon Statewide Planning Goal 10: Housing requires local governments to provide clear and objective standards for needed housing. Planners, designers and local residents recognize that more flexible development standards usually produce superior development while current implementation of the state required clear and objective (less flexible) standards prevents bad design but rarely encourage place-specific, context-sensitive design solutions. However, communities rely on clear and objective regulations because they are easier to administer and are recognized as more "fair." The resulting codes are rigid and do not allow much

variance in designs. Instead they prescribe blunt solutions for a vast range of development sites that would benefit instead from contextual responses. Codes that are flexible and allow a contextual response by offering alternatives achieve more appealing and suitable compact, mixed-use projects. Alternative code approaches, particularly form-based and menu-based codes, offer better opportunities for increasing flexibility as well as development capacity.

How to use it:

Form-based codes: Form-based codes provide a method for regulating the physical form of development with clear and objective standards that allow flexibility and variation in the final built product so that designs can respond to the context. Elements such as building envelope (the outside area of the building), key dimensions, siting, and the relationship to adjacent buildings and the sidewalk are specified to a high level of detail in the code. Architectural styles are not prescribed, with the exception of the listing of allowable and prohibited materials and the location of signs. The intent of this strategy is to achieve a variety of architectural styles with structures appearing as if they evolved over time. To further achieve this goal, building requirements are sometimes waived for civic sites in order to provide greater flexibility for special architectural statements.

Recognizing that uses will change over the lifetime of a building, form-based codes de-emphasize density and use regulation in favor of controlling the built form. The code favors a mix of uses and housing types. It also recognizes the importance of the design of the public realm and the influence of individual buildings in shaping the streetscape.

Form-based codes often use street types to determine the physical design of buildings and shape well-defined spaces. The street is the organizing principle behind the code in order to create higher-quality environments as experienced by pedestrians. This approach helps ensure that building development and design standards create a clearly defined street hierarchy. Thus, the building type and design should be directly related to the type of street it is facing. For example, buildings on smaller-scaled local streets should have different uses, setbacks, heights and frontage elements than buildings on larger-scaled streets that serve the broader region.

Another central tenet of the form-based code approach is that changes in building bulk, height and massing are gradual and take place at the back of the lot. Increases in height generally do not exceed one story, stepping up a half-block at a time. If building heights exceed this standard, dimensions for setbacks, stepbacks and design are specified to ensure privacy and adequate transition. This stepping effect usually takes place over several blocks, so this approach may not work in many corridors, which generally include one or two blocks on each side of a main street.

The form-based code describes the appropriate transition for each block using clear and objective language as well as graphics, bypassing the need to oversee transitions on a case-by-case basis. As further described in the section on visualizing zoning,

form-based codes also represent a more visual alternative to conventional land use regulations, creating flexibility in the code and serving as a communication and policy-making tool.

Form-based codes replace existing zoning codes and can be mandatory or optional offering several implementation options for local governments. A form-based code can be integrated into the existing code, applied as a "by right" designation to selected zones and cross-referenced to existing code provisions. It can also function as an optional parallel code system within a separate chapter that has unique provisions not cross-referenced to other parts of the code, making this an available option in designated zones. Form-based codes can also take the form of floating zones that are triggered by an application to rezone a property.

Form-based codes are often confused with design guidelines. However, they are not discretionary. While they offer flexibility like design guidelines, they do so by offering choices between objective standards rather than by offering multiple ways of meeting an aspirational guideline.

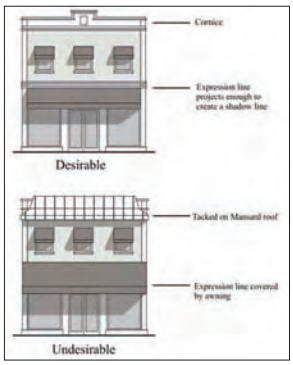
Form-based codes cannot be transported from another jurisdiction without customization. As context-sensitive codes, they must be tailored to the specific built environment and local efforts. Form-based codes can be created for infill areas if they start from a complete understanding of existing development patterns and building form. Such an inventory must be part of the work effort to develop a form-based code.

Existing use of the tool in the region: Form-based codes have not been widely implemented in Oregon. Several cities in California and around the country have successfully integrated form-based codes into existing codes, with Petaluma and Hercules being the most commonly referenced.

Example approach

City of Hercules, California

The city is achieving varied building styles and creatives responses to the architectural guidelines.

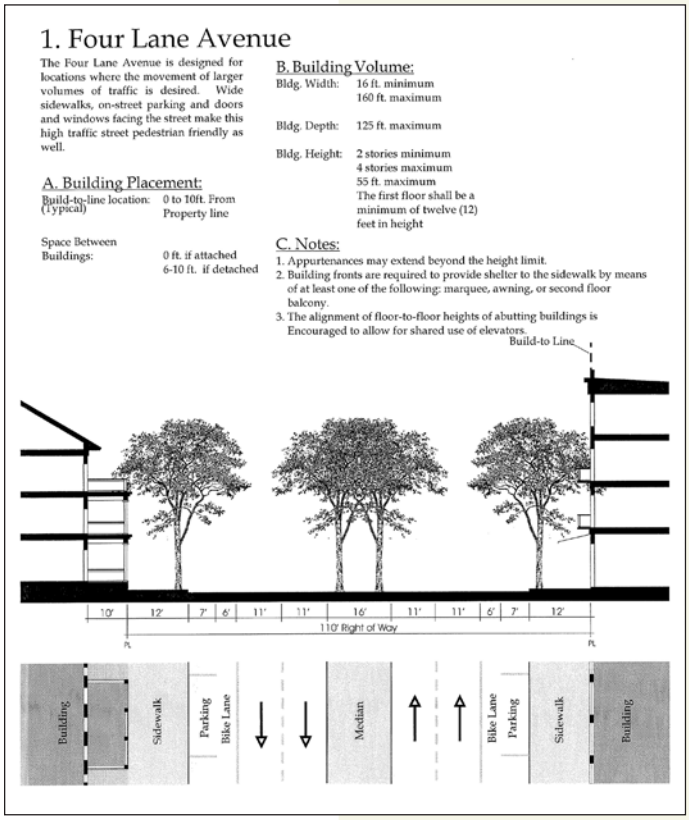


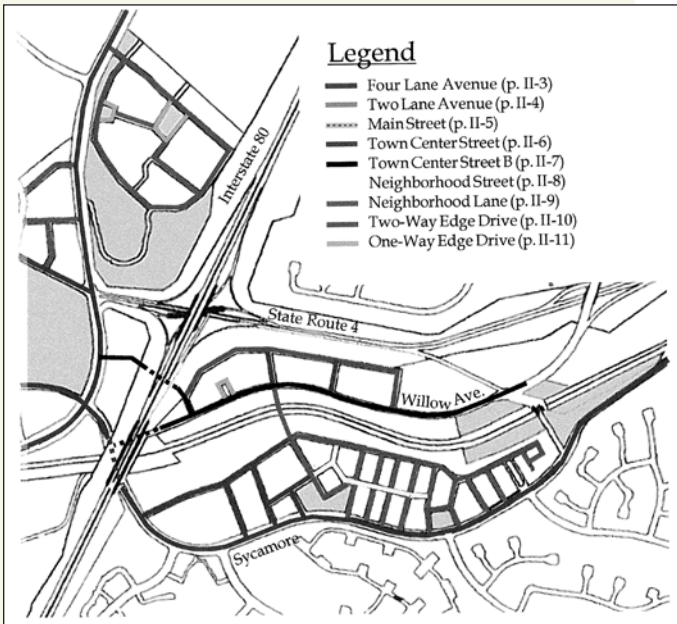
Form-based codes

The City of Hercules, California, recently adopted a new design code with the intention of fostering smart growth development. The code, while highly specific in terms of physical form (by regulating building envelope, key dimensions, siting, and relationship to streets, sidewalks, and adjacent buildings), retains flexibility in uses. The code does not prescribe architectural styles but does prescribe a minimum set of basic design parameters.

Users of the code consult the regulating plan and determine the classification of the street in front of their parcel. Then they cross-reference the code relating to the street type to determine the applicable land development regulations. The code is sub-divided into four districts and eight distinct street types. Where two street types meet, the order in the hierarchy determines the code. Build-to-line requirements and building frontage requirements are waived for certain sites such as civic facilities in order to provide greater flexibility.

The new code has been successful, with a total of 300 units built and construction underway on the main street area of the Waterfront District. Developers have responded to the code with attractive projects that foster a mix of uses. New homes blend in with existing housing. The city is achieving varied building styles and creative responses to the architectural guidelines.

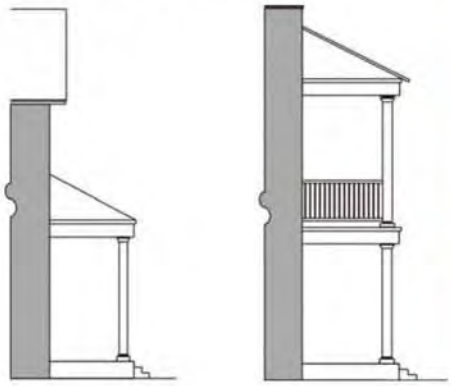




This illustration depicts a district of streets suited to serve a fine-grained mix of uses. The City expects a mix of allowed uses to occur in all neighborhoods and blocks. The City will require a mix of uses within buildings along Main Street and the Four Lane Avenue. The City will not require particular uses nor a particular distribution of uses, but will require the integration of residential and commercial uses. Uses allowed by right, by permit, or that are prohibited are listed in Chapter V of this Code.

The City will require a variety of architectural styles along all street types. However, along Main Street and the Four Lane Avenue, proposals for colonnades will be scrutinized to ensure adequate sight distance for automobile drivers.

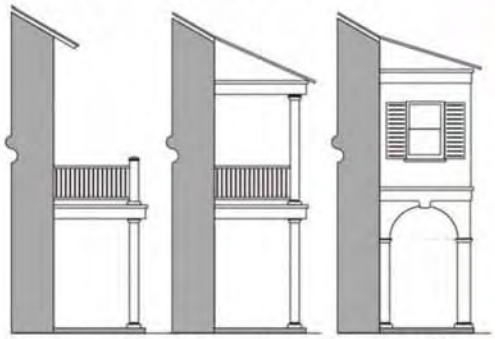
C. Front Porches



Depth = 8 ft. minimum
Length = 25%–90% of building front

- Front porches may have multi-story verandas and/or balconies above.
- Front porches shall be forward of the build-to line but shall not extend into the right-of-way.
- Front porches must be open, un-air-conditioned parts of the buildings. No more than 75% of the floor area of a porch shall be screened if the porch extends forward of the build-to line.

D. Colonnades/Arcades



Depth = 8 ft. minimum from the build-to line to the inside column face
Height = 10 ft. minimum clear
Length = 75%–100% of building front

- Columns shall be a maximum of 6-in. wide in front of shop-front windows.
- Open multi-story verandas, awnings, balconies, and enclosed useable space shall be permitted above the colonnade.
- Colonnades shall only be constructed where the minimum depth can be obtained. Colonnades shall occur forward of the build-to line and may encroach within the right-of-way, but shall not extend past the curb line.
- On corners, colonnades may wrap around the side of the building facing the side street.
- Colonnades and arcades are not permitted on the four-lane avenue.

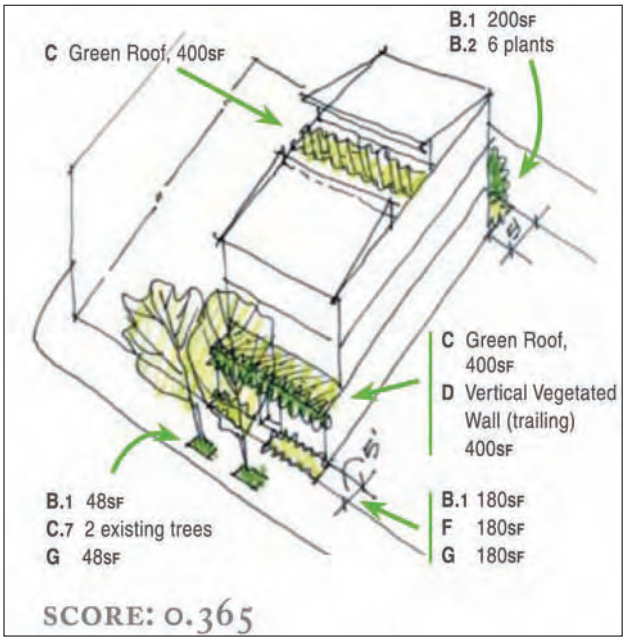
Excerpts from the City of Hercules' form-based code detailing street types and architectural standards

The nuts and bolts

Menu-based point system codes: Menu approaches provide more flexibility in achieving code intent and site design that responds to the local context. They include code choices for the developer that can be selected based on the context of the site. The intent of the code is stated and several strategies are listed that will meet this objective, each with an associated point value based on its ability to achieve the code objective as well as other local goals of sustainability and place-making. Points are accrued by combining a range of design elements. A certain overall point value must be reached in order to meet the requirement. This strategy would be particularly successful along the region's corridors or in its centers to allow contextual responses to very different natural and physical environments.

Existing use of the tool in the region: Seattle, Washington, has experienced success with its menu-based code approach to its landscape requirement. It replaced mandated percentages of open space with a list of landscaping options. The system, targeted at new development in commercial areas, retains flexibility for developers while ensuring sustainable landscapes that create visually distinct places and help create an identity for these neighborhoods.

In this region, there are no examples of this type of menu-based point system being assigned to design alternatives. However, the City of Oregon City uses a menu approach for its garage standards defining multiple design standards that provide good design at reasonable costs. The provision requires a minimum number of elements to be included in the design of garages for homes on corner lots and through lots. Options include dormers, recessed entries and front balconies. Depending on the number of design elements met, a greater percentage of street-facing façade or an increased extension in front of the street-facing façade is allowed.



Examples of how points are calculated for landscape requirements using Seattle's Green Factor menu-based point system

Example approach

City of Seattle, Washington

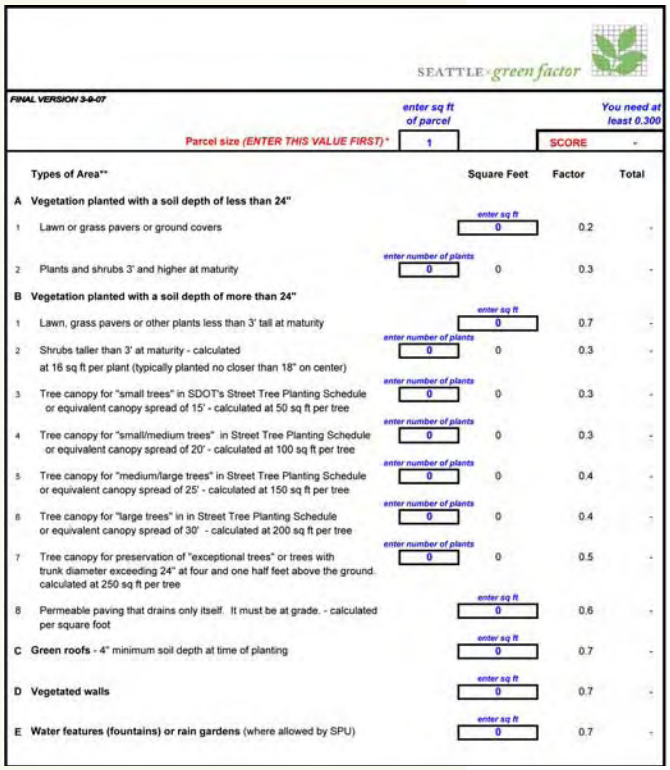
Menu-based point system

Green Factor, the City of Seattle's landscape requirement, was developed as part of an attempt to green the city's neighborhood business districts. Any new development in neighborhood business districts with multiple dwelling units or a certain amount of commercial uses or parking spaces is required to have the equivalent of 30 percent of the parcel vegetated. The Green Factor is intended to increase the amount and quality of urban landscaping in dense urban areas while allowing increased flexibility for developers to efficiently use their properties.

Green Factor provides a list of possible site landscaping options from which an applicant can choose. Each option is assigned a specific point value. Calculations are then made using a spreadsheet available on the city's web site that multiplies the number of plants or the square footage by its point factor. By either increasing the number of plants or the square footage of vegetated land, one can accomplish the aggregate required green factor. Bonus points can also be awarded.

The approach, based on similar codes in Europe, supports a landscape strategy that encourages sustainability and increases green space in the city. Previously, the landscaping requirement mandated a percentage of open space on a development site, but this did not ensure that the resulting landscaping would necessarily be green or sustainable. The code change was designed to improve the "extent and quality of landscapes" while increasing flexibility for those seeking to meet open space requirements.

The approach, based on similar codes in Europe, supports a landscape strategy that encourages sustainability and increases green space in the city while increasing flexibility for those seeking to meet open space requirements.



SEATTLE×green factor

FINAL VERSION 3-9-07

Parcel size (ENTER THIS VALUE FIRST)* enter sq ft of parcel: 1 — You need at least 0.300 — SCORE -

	Types of Area**		Square Feet	Factor	Total
A	**Vegetation planted with a soil depth of less than 24"**				
1	Lawn or grass pavers or ground covers		enter sq ft 0	0.2	-
2	Plants and shrubs 3' and higher at maturity	enter number of plants 0	0	0.3	-
B	**Vegetation planted with a soil depth of more than 24"**				
1	Lawn, grass pavers or other plants less than 3' tall at maturity		enter sq ft 0	0.7	-
2	Shrubs taller than 3' at maturity - calculated at 16 sq ft per plant (typically planted no closer than 18" on center)	enter number of plants 0	0	0.3	-
3	Tree canopy for "small trees" in SDOT's Street Tree Planting Schedule or equivalent canopy spread of 15' - calculated at 50 sq ft per tree	enter number of plants 0	0	0.3	-
4	Tree canopy for "small/medium trees" in Street Tree Planting Schedule or equivalent canopy spread of 20' - calculated at 100 sq ft per tree	enter number of plants 0	0	0.3	-
5	Tree canopy for "medium/large trees" in Street Tree Planting Schedule or equivalent canopy spread of 25' - calculated at 150 sq ft per tree	enter number of plants 0	0	0.4	-
6	Tree canopy for "large trees" in in Street Tree Planting Schedule or equivalent canopy spread of 30' - calculated at 200 sq ft per tree	enter number of plants 0	0	0.4	-
7	Tree canopy for preservation of "exceptional trees" or trees with trunk diameter exceeding 24" at four and one half feet above the ground. calculated at 250 sq ft per tree	enter number of plants 0	0	0.5	-
8	Permeable paving that drains only itself. It must be at grade. - calculated per square foot		enter sq ft 0	0.6	-
C	**Green roofs** - 4" minimum soil depth at time of planting		enter sq ft 0	0.7	-
D	**Vegetated walls**		enter sq ft 0	0.7	-
E	**Water features (fountains) or rain gardens** (where allowed by SPU)		enter sq ft 0	0.7	-

The nuts and bolts

Menu-based design codes: Oregon law requires cities and counties that establish housing growth targets to provide clear and objective standards for design codes for those residential needs. The resulting non-discretionary site plan review track provides a fast and reliable option, with predictable review and approval timelines. However, use and building form are highly prescribed and often no option is made available for adjustments or variances to make the project fit the local context. This can pose a challenge for compact mixed-use projects.

Cities and counties can deal with the tension between clear and objective regulations and more flexible discretionary review by offering developers a choice. Similar to a menu-based point system approach, menu-based design codes offer several design approaches that can be used to meet design standards. Paired with development standards, these design standards are administered as part of the site plan review process. Unlike design guidelines, they are not discretionary. All new structures and renovations within a targeted area are required to meet these standards.

Each design standard includes an intent statement explaining the goal to be accomplished as well as approaches or methods that can meet these objectives. These are accompanied by elements or techniques that provide detail for meeting the goals and objectives. In addition, graphic resources within the code include photos and 3-D diagrams to help explain the elements and further clarify what meets the design standards. In return for meeting the standards, applicants' projects are reviewed administratively, providing a time and cost savings to the developer while also ensuring that the design intent of the targeted area is met.

Existing use of the tool in the region: The City of Canby is proposing a design and development standard ordinance for its central business district. Other local governments such as Hillsboro or Washington County offer a two-track review process with clear and objective standards and discretionary design guidelines. A menu-based approach may be preferable in certain areas given the graphic nature of the code and the flexibility it allows. The City of Hayden, Idaho recently implemented a development and design standard ordinance similar to the one being contemplated in Canby.

Canby, Oregon is proposing flexible, graphic-oriented design and development codes for its downtown

Example approach

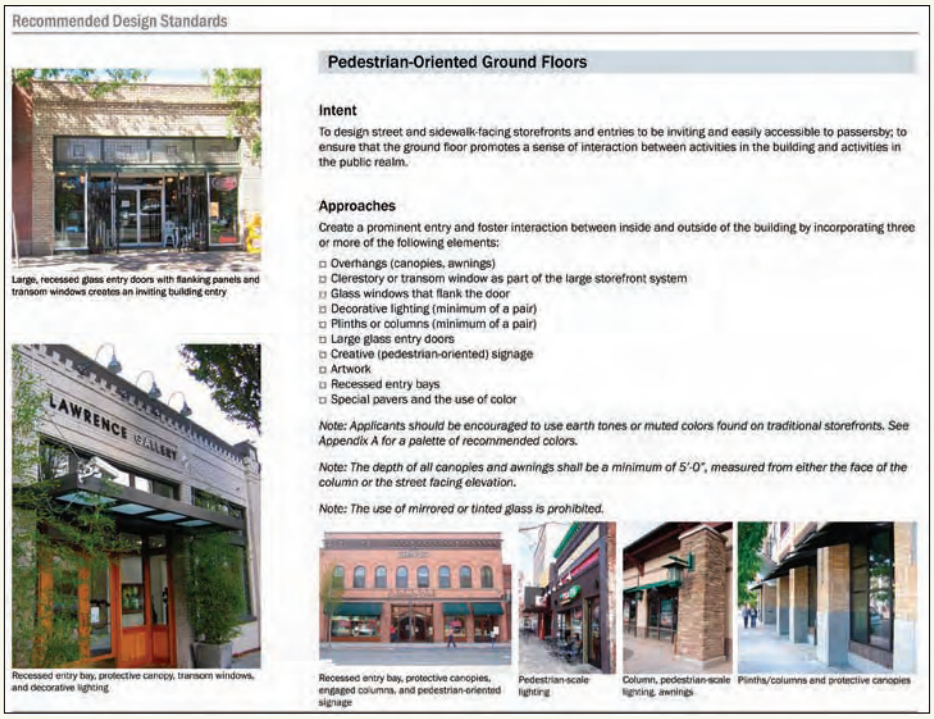
City of Hayden, Idaho

Graphic menu-based design code

Seeking to implement its vision for a vibrant downtown, the City of Hayden, Idaho, formed an urban renewal district and developed a strategic implementation plan for the community's downtown revitalization. The implementation plan includes development and design standards that provide a palette of design-related approaches and tools to raise the quality of the design along the city's main street.

A graphic development code was created to require key standards such as scale, density, and height while offering a menu of clear and objective approaches to achieve design standards. All new construction and renovations of existing structures within the downtown are required to meet all development and design standards. A two-track process was also offered to anyone who chose to respond even more creatively to the design standards and demonstrate how they were meeting the intent.

While not innovative in its two-track process, Hayden's design standards provide a more graphic and flexible framework for achieving the city's vision of a vibrant and attractive downtown. Various design themes are addressed in the standards. Each theme is further explained through a design intent statement that describes the objective. Design approaches are then presented with accompanying graphics to detail methods that can be applied to meet intent. Applicants are required to include a certain number of design elements from the menu presented in order to achieve the stated design intent.



Recommended Design Standards

Large, recessed glass entry doors with flanking panels and transom windows creates an inviting building entry

Recessed entry bay, protective canopy, transom windows, and decorative lighting

Pedestrian-Oriented Ground Floors

Intent

To design street and sidewalk-facing storefronts and entries to be inviting and easily accessible to passersby; to ensure that the ground floor promotes a sense of interaction between activities in the building and activities in the public realm.

Approaches

Create a prominent entry and foster interaction between inside and outside of the building by incorporating three or more of the following elements:

- Overhangs (canopies, awnings)
- Clerestory or transom window as part of the large storefront system
- Glass windows that flank the door
- Decorative lighting (minimum of a pair)
- Plinths or columns (minimum of a pair)
- Large glass entry doors
- Creative (pedestrian-oriented) signage
- Artwork
- Recessed entry bays
- Special pavers and the use of color

Note: Applicants should be encouraged to use earth tones or muted colors found on traditional storefronts. See Appendix A for a palette of recommended colors.

Note: The depth of all canopies and awnings shall be a minimum of 5'-0", measured from either the face of the column or the street facing elevation.

Note: The use of mirrored or tinted glass is prohibited.

Recessed entry bay, protective canopies, engaged columns, and pedestrian-oriented signage

Pedestrian-scale lighting

Column, pedestrian-scale lighting, awnings

Plinths/columns and protective canopies

A page from a recently adopted flexible development and design standards ordinance, City of Hayden, Idaho

Hayden's design standards provide a more graphic and flexible framework for achieving the city's vision of a vibrant and attractive downtown.

Keep in mind

Management: Rewriting local codes to incorporate the above approaches will require an upfront effort. In addition, some of the approaches require some discretion and ongoing management by staff. If employed, these more in-depth staffing efforts should be directed at centers and corridors, as they are more dynamic areas that require greater flexibility for site-specific redevelopment. Form-based codes and graphic development codes may be more appealing to local governments if buildings that meet specific standards of the code are allowed outright rather than requiring a discretionary review process. Likewise, menu-based approaches may offer a similar advantage since decisions are not discretionary but instead based on the total point value or the inclusion of one of the options provided in the design standards.

Menu-based design standards may also work well for smaller cities that do not have the resources to overhaul their existing zoning code with a form-based code or to administer a code that requires a higher level of discretion than existing objective zoning standards.

Standards: New codes must be consistent with Oregon laws governing land use, providing clear and objective standards that are quantifiable. Form-based codes, menu-based codes and graphic development codes all accomplish this goal. When implemented into local codes, care should be given to express development requirements as clearly as possible while not creating overly perscriptive standards.

If building style guidelines are too specific in a form-based code, built results can appear overly homogenous. Limiting the inclusion of specific architectural elements and building materials, and focusing instead on how buildings relate with the context of the surrounding neighborhood, will help reduce this feeling of uniformity.

In addition, form-based codes focus on the built form and do not necessarily require or prioritize the consideration of other planning elements such as environmental features, housing choices, or economic development. Local governments should carefully consider these other factors when writing a form-based code to ensure the new design and development requirements support the other goals of the community.

Better buildings: Adding flexibility into the process can result in more attractive buildings. Likewise, integrating design principles into codes through graphic media can ensure that the intent of the codes is more clear. Universal design elements result in creative project designs that can be more site-specific by allowing applicants to respond to intent, rather than prescriptive guidelines. To ensure this flexibility in form-based codes, the intent of the code as well as standards for variances and exceptions should be clearly explained using both text and images. Otherwise, an unusually high burden falls on the developer requesting the variance to prove the project still meets the intent of the code.

Putting it together

As additional investments are made in the region's centers and corridors, graceful transitions need to be created at the edges of these areas. Form-based codes and codes that allow applicants to choose from a menu allow context-sensitive design solutions in and around centers and corridors. By building this flexibility into regulating codes and by enabling architectural responses to the existing community design, cities and counties can realize more attractive transitions that improve the quality of centers and corridors as well as the surrounding neighborhoods.

Tips for implementation

- Develop a menu-based approach or a form-based code to offer applicants multiple options for achieving design objectives.
- Use form-based code techniques to emphasize the design of the public realm, provide high quality environments for pedestrians, and set specific standards for achieving a gradual transition between areas of differing urban form.
- Consider the time and expertise (either staff or outside consultant) required to customize and develop a form-based code.
- Write clear and objective standards for these new code approaches.
- Craft clear intent statements explaining the goal to be accomplished, and provide graphics such as photos and 3-D diagrams to illustrate the types of development that meet the intent statement.

An example of a transition between an active corridor and the surrounding single-family residential neighborhood, Belmont District, City of Portland

Toolkit

Innovative design and development codes

Transition zones

The implementation of gradual transitions in building form, which ensures more attractive edges where centers and corridors meet single-dwelling neighborhoods, is integral to supporting vibrant communities throughout the region. The required density established at the edge of a center, corridor or transit station area may be abruptly different from and incompatible with the surrounding areas. Despite this difference or as a means to reduce this difference, allowed building heights inside the center or along the corridor may be too low for mixed-use buildings. Compounding this problem is zoning in centers and corridors that only allow multi-dwelling housing types and surrounding neighborhoods that only allow single-family housing types. This pushes the multi-

family housing towards rental housing. This serves to increase the incompatibility and tension with adjacent single dwelling residents, increasing the disparities between different zones rather than integrating them.

Currently many local governments use a case-by-case review of transition areas to address height transitions between new, higher density developments built near lower-density existing areas. Conditions of approval are applied to ensure the development uses a combination of transition elements outlined in the municipal code. These approaches include using open areas, natural vegetation or fences to separate and screen new structures from adjacent parcels; orienting windows away from adjacent uses; building roadways to separate the project; or applying gradual density changes. While these measures may provide the city with some discretion in the design of a building, they translate into lost development capacity and are not necessarily ideal measures to achieve attractive transitions.

Transition zones can improve the relationship between buildings and zones of different scale, reduce design issues and achieve the compact mixed-use development envisioned in the region's centers and corridors. Creating graceful transitions in building form will also help build support for infill and redevelopment projects from adjacent neighborhoods and maintain support for the region's vision for growth. The model code approaches explained below can also help centers and corridors, and the area surrounding their edge, integrate a range of housing types in order to better achieve a smooth transition in building form.

These transition zones can offer more flexible codes that respond to the local context at the edge of the centers and corridors. They also allow nuanced design approaches that can help create more graceful transitions between varying densities, uses and heights. Code standards that focus on a more gradual transition of building heights at the boundaries of different zones provide an important tool to ease infill development in established neighborhoods.

How to use it:

Cottage clusters: Even with trends in housing showing that household size is decreasing, single-family housing overwhelmingly remains the preferred housing type. A new model of smaller single-family homes is emerging in the form of cottages clustered around a common green space. This presents a new and attractive approach to increasing the density within existing neighborhoods while maintaining the single-family housing character and ownership opportunities. Allowing this type of development in single-family zones only requires minor amendments to an existing zoning code. Currently, this development type violates most communities' minimum lot sizes and setback requirements for side and rear yards.

Given the smaller size of the homes, more efficient use of the land, and lower maintenance costs, small lot detached homes offer a more affordable product. As a result, cottage clusters increase the diversity of market options within a community and give cities the ability to retain younger couples, small families, and empty-nesters in the residential market. Cottage ordinances can greatly affect the ability of builders to target certain market segments and offer an opportunity for some to enter the market.

Example approach

City of Bainbridge, Washington

Cottage cluster provision

Some cities in Washington and Oregon have adopted Cottage Housing Development code provisions to allow the development of several small, detached cottages on a site that would normally be developed with fewer large homes.

Cottage Housing Development codes are not multi-dwelling or overlay zones but instead provide another form of single-family development. In the City of Bainbridge, cottage housing is allowed conditionally in all single-family zones as detached dwellings as opposed to condominiums on a common lot. The code requires that cottages be less than 1,000 square feet in living area and limited in height. At 2,500 square feet, lots are allowed to be smaller than standard single-dwelling lots. Parking must be clustered and separated from open spaces rather than being provided at each individual cottage. Cottages must also be oriented around a landscaped common area that is central and serves as a gathering space. Developments are limited to a dozen units so as to maintain a sense of community. With careful attention to the design of units, open spaces and landscaping, cottage clusters could blend very well into the surrounding neighborhoods of older, detached homes.

Cottage cluster model code, LMN Architects

"I think it's a significant trend, better rather than bigger, quality over quantity, it's something people have been waiting for. It takes more work, details and supervision but – like the old pre-1940s craftsman homes with mantels and casings – they are homes that get a premium price."

– Jim Soules, Cottage Company, LLC

The nuts and bolts

With careful attention to the design of units, open spaces and landscaping, these developments can blend well architecturally into the surrounding neighborhoods of older, detached homes. Communities also look more favorably upon this type of project if, as throughout Washington state, they are an ownership product, providing homes on individual legal lots whose residents have a long-term investment in the neighborhood.

Given the economics of land cost, single-dwelling neighborhoods, particularly at their edges with centers and corridors, are optimum locations for cottage clusters. The economic edge for cottages is the low land cost per unit, which cannot be achieved in multi-dwelling residential zones where land is more expensive. Along with cottage clusters, allowing accessory dwelling units (ADUs) and duplexes on corners in single dwelling zones helps achieve a gentle transition from the edge of centers and corridors and provides additional housing choices.

Existing use of the tool in the region: Within the Pacific Northwest, projects such as the Greenwood Avenue Cottages in Shoreline and the Third Street Cottages on Whidbey Island, both in Washington, have demonstrated that these small cottages can fit into existing single-dwelling neighborhoods while increasing density levels. In the more immediate region, The Cottages at Hastings Green in Portland has been a successful cottage cluster project. However, it was developed as condominiums since the setbacks and lot size did not comply with city zoning. The project consists of 23 detached bungalows owned as condominiums located in Southeast Portland. The project was completed in 2004 and has been recognized as a superior form of infill development given the focus on high-quality design and construction as well as an emphasis on community through site design. All local governments in the region allow accessory dwelling units in single dwelling zones. In Portland, duplexes on corners are allowed in certain single dwelling zones.

Density transfers: By allowing the transfer of all or a portion of the permitted density to a contiguous site, density transfers can also facilitate more graceful transitions between zones of different scale. If used, the transfer must be recorded in a covenant in the deed for the property. Another effective way to transfer density is to permit greater flexibility in how density is distributed throughout a subdivision or specified district such as a center or corridor. This approach allows flexibility on the density of an indi-

vidual site as long as the district or subdivision's overall density target is met. Developers could use this portion of the district or subdivision ordinance to ease the transition from more compact urban development to single family neighborhoods or more suburban development without the additional expense and time associated with additional review.

Planned Unit Development (PUD) provisions provide another way to transfer density within a development site. As a provision, PUDs offer a mechanism for projects that demonstrate certain public benefits to pursue more creative and innovative development than allowed under existing zoning regulations. PUDs provide a less complicated alternative than transfers of density and can be maintained over a longer term. However, current PUD provisions are not the best tool to achieve this transfer of density for several reasons. In most communities, eligible sites must be a minimum of five acres to be eligible for the provision. Most redevelopment sites in centers and along corridors are smaller than this and do not qualify. Some local governments' PUD ordinances preclude building for-sale units or units for commercial use. Since PUDs do not allow development by right and require a public hearing, even if the applicant meets all these restrictions, there is no certainty that an application will be accepted. All of these factors extend the time for approval and therefore drive up the cost associated with seeking a PUD.

To reduce the challenges and take advantage of the flexibility of PUDs in centers and corridors, PUD provisions could be altered to apply to smaller sites and to allow all types of housing and uses. In addition, PUD provisions could be applied by right to centers and corridors and areas at the perimeter that are in need of better-designed transitions.

Existing use of the tool in the region: Portland has enjoyed limited success with the transfer of density. New Columbia, an award-winning mixed-income housing project, was able to use the city's revised land division code provisions for density transfers. This tool helped achieve a graceful transition between the medium density, multi-dwelling zoned site and the surrounding single-family residential neighborhood. The City of Oregon City facilitates transitions through its subdivision code. Areas of lots within a subdivision are allowed to be up to ten percent less than the required minimum lot area of the applicable zoning designation provided that the entire subdivision meets on average the minimum site area that is required by the underlying zone.

Example approach

New Columbia

The project's design sought to reintegrate the area with the adjacent neighborhood.

Density transfers

New Columbia, located in North Portland, is a federally funded (HOPE VI) revitalization project of an existing 82-acre public housing site into a mixed-income housing community. The project's design sought to reintegrate the area with the adjacent surrounding neighborhood by extending the grid of existing streets, matching the historic patterns of development in the area and providing a range of housing opportunities for a range of incomes. The site is zoned R2, allowing about 17 dwelling units per acre, while the surrounding neighborhood is zoned R5, with one unit per 5,000 square-foot lots.

Neighborhood support for the project was crucial, especially since the development represented a twofold increase in density and in the number of subsidized housing units that had previously occupied the site. To avoid an abrupt and unwelcome lack of transition at the edge of the site, the project's urban designers took advantage of the City of Portland's recently adopted Land Division Code to facilitate a transfer of development density.

This transfer served to achieve a gradation of density from the edge to the center of the development. At the edge of the site, density was slightly higher than that of the surrounding areas, but buildings were designed to mirror the setbacks and height of the R5 housing across the street. Density was shifted to more appropriate locations within the interior of the site, with the transition spread out over several blocks from the edge of the single-family neighborhood to the center of the development. An important factor in accomplishing this type of transition was the significant size of the site.

Through a density transfer, New Columbia achieved a gradation of density from the center to the edge

Plan provided by the Housing Authority of Portland

Buildings were designed to mirror the setbacks and height of the existing housing across the street Photography provided by SERA

The nuts and bolts

Stepbacks: In addition to overall building height, some ordinances address the height of the street wall, allowing projects to step-back with subsequent stories so that the apparent scale is not as great but the density can be higher. Additional height and density may be allowed only to the extent that the building's upper floors are distributed in a way that adds significantly to the sense of slenderness to the buildings. For example, upper floors should be smaller than midsection floors, which should be smaller than the base. Setbacks are another tool that can be used to increase the separation between buildings as building height increases, increasing solar access and air circulation in order to make a smoother transition in building forms.

Stepbacks and height limits can be used in combination, reducing height limits and increasing setbacks to ease the transition between higher and lower density zones for buildings in a "transitional zone." Stepbacks have been used for mixed-use projects in town centers and across the street from established single-family neighborhoods. However, development capacity on sites can be reduced unless the stepback is accompanied by higher density allowances elsewhere on the site.

Stepbacks can also complicate building design as well as increase the potential for moisture intrusion, which poses a liability concern. Requiring stepbacks will raise the overall cost of designing and developing the building, thus potentially affecting financing.

Existing use of the tool in the region: Stepbacks are identified as a tool to help transition between uses in the Hollywood Plan District in the City of Portland.

Example approach

Hollywood Town Center

Stepbacks

The Hollywood Plan District includes specific standards for a transition in building height when commercial zones are abutting or across the street from low and medium density residential zones. The Hollywood Plan District also includes standards for a transition in height when a commercial site where height bonuses are being used is across a street from a less intense commercial zone.

The Hollywood Library and Bookmark Apartments mixed-use development, although designed before these standards were officially adopted, was developed to comply voluntarily with these guidelines for height transitions. The site is located near the edge of the Plan District between two commercial zones. Different height limits were allowed in each of the two zones, and thus the design used stepbacks to bridge the two districts' development types.

The resulting design and development have not been viewed as a total success. From the development point of view, capacity was lost due to the stepbacks, which was not fully recovered. From the perspective of the immediate neighbors, the building's massing (the different components of the building) is out of scale with existing development and the stepbacks are not viewed as an attractive design feature.

Stepbacks on the Bookmark Apartments, Hollywood Town Center, City of Portland

The site is located near the edge of the Plan District between two commercial zones, and thus the design used stepbacks to bridge the two districts' development types.

The nuts and bolts

Mixed-use development standards: It is important to establish the correct density and height in centers and along corridors. Too often code standards for building heights have been set without understanding the design needs of mixed-use buildings. As a result, storefronts and living areas in these buildings are not accommodated, which creates a barrier to desired types of development. In addition, municipal planning codes and locally adopted building codes can interact in such a manner that they unintentionally push buildings toward lower ceiling heights.

A study conducted in San Francisco determined that taller ceiling heights on both the ground floor and upper stories of existing older buildings in that city contributed to the appealing appearance of neighborhood commercial streets, a positive pedestrian experience and a healthy retail market, making them the some of the most vibrant neighborhoods in the city. Through three case studies of allowable ceiling heights in different neighborhoods, the report examined the resulting impact of their code on the potential for infill and the design and experience of buildings and neighborhoods. As a result, to allow taller floor-to-floor heights in mixed-use buildings, the City of San Francisco amended its code to increase allowable heights in all mixed-use areas. The amendments include raising the height limits and requiring a minimum ground floor ceiling height. In addition, San Francisco created new provisions for an extra five feet in some residential-only zones to encourage walk-up townhouses raised a few feet from grade.

Existing use of the tool in the region: In the region, many jurisdictions apply maximum building height limits of 30 to 35 feet in lower density residential zones and building heights from 40 to 65 feet or greater in higher density residential, mixed-use or commercial areas in centers and corridors. Some jurisdictions in the region already acknowledge that different uses require different floor-to-floor heights, such as 15 feet for ground floor retail uses. In addition, some cities have indicated the number of floors allowed in specific zones to further clarify the intent of the height requirements and allow contextual design responses to specific uses.

Example approach

City of San Francisco, California

Height study

In 2004, David Baker, founder and partner of David Baker + Partners in San Francisco, wrote an article for a local non-profit think tank researching existing height limits in the city and their effect on storefronts and ground floor activity. Looking at 40-foot, 50-foot and 65-foot planning code height limits, Baker suggested simple adjustments that could be made to the code to achieve the "highest and best" interior building spaces and exterior pedestrian realm. He found that the municipal planning code and the building code (UBC) interacted in such a manner that they unintentionally pushed buildings toward lower ceiling heights. For example, given the minimum allowable floor-to-ceiling heights of the UBC, adding five feet to 40-foot height limits in the planning code would allow higher quality spaces. He concluded that the requirements of the municipal code and the building code should be aligned in order to increase the quality of the environment within new buildings and around them.

Looking at 40-foot, 50-foot and 65-foot planning code height limits, Baker suggested simple adjustments that could be made to the code to achieve the "highest and best" interior building spaces and exterior pedestrian realm.

Baker advocated for allowing extra-tall ground floor spaces to make mixed-use development comfortable from the street and taller ceiling heights to make upper stories gracious and comfortable. To accomplish this objective, Baker argued that the planning code should be amended to regulate not just the total height of buildings but also the allowable number of floors. This could be accomplished by either requiring minimum ceiling heights that are taller than the building code currently allows or by setting a maximum number of floors allowed within a given building height. Baker acknowledged that if the number of floors that could be built were simply reduced the total density of new buildings would also be reduced, resulting in an increase in housing costs and development on the periphery of the city. Thus, he recommended increasing height limits while allowing the same number of stories as currently allowed. At the very minimum, he recommended that minimum ceiling heights be set on the ground level given its impact on the quality of the public realm.

David Baker height study Images provided by David Baker + Partners

Keep in mind

Development capacity: Allowing new building types and flexible design alternatives in zones of transition can ensure that development capacity is retained in centers and corridors while development responds to the context of the adjacent neighborhoods. Furthermore, offering incentives or the ability to transfer additional densities from another site can actually increase development capacity and attract redevelopment. By allowing transitional densities at the edges of centers and corridors, cities can increase capacity by zoning their regional or town center for higher levels of density.

Housing choices: Using cottage housing provisions and the transfer of density encourages a broader range of housing types to include small homeownership units. It is critical that cottage housing provisions create ownership opportunities. This can be done as condominiums, but preferably as separate lots to maintain ownership of the land with the unit. This can provide new and affordable housing opportunities for the single-family market and also help win the support of the surrounding neighborhood.

Local application: Cottage housing and stepback codes are relatively easy to implement. Transferring density is significantly more complicated. Transfer of density to a more appropriate location within the same site does not work for smaller sites given the size constraints. Unfortunately, most infill sites available for redevelopment along corridors are smaller in scale. One approach that may be particularly appropriate for corridors would allow a transfer of density from one site to another along a corridor, or from a corridor to a center. There are no known examples of this type of density transfer since the proposal is controversial and complicated to put in place, although the City of Portland has considered an FAR transfer within its Central City Plan District and it has been implemented at the subdivision level. If improved, Planned Unit Development provisions could also offer a smaller-scale alternative.

Transition implementation: As a proactive tool to ease infill development, transition height standards are most effectively addressed up front in the planning process or as part of crafting code standards for specific geographic areas such as town centers or corridors. Through the planning process, urban designers, planners and neighborhood groups can identify the specific edges where there is potential for an abrupt difference in building heights and focus height transition standards to those particular areas. Developers are more likely to support transition height standards if they are assured that building heights consistent with the transition standards will be allowed by right.

Putting it together

Allowing greater intensity and maximizing development capacities within centers and corridors supports the vision of the region's 2040 Growth Concept. In many cases, the current zoning does not allow for the necessary transition between these areas of compact urban development and surrounding single-family neighborhoods. Tools that create better relationships between buildings and zones of different scale, such as cottage cluster ordinances and density transfers, provide alternative approaches to ease these transitions while maintaining development capacity.

Tips for implementation

- Identify areas where the transition between densities and types of development can take place.
- Consider "soft" intensification of areas just outside of centers and corridors through a combination of cottage clusters, accessory dwelling units and duplexes on corners.
- Consider tools that will help move the density closer to the core of a regional or town center.
- Design appropriate transitions that take into account existing and future development.
- Decrease lot size requirements in order to allow homeownership opportunities for cottage cluster development types.
- Create graceful transitions between corridors and centers and their adjacent single-family zones over several blocks where it is possible.
- Consider allowing density transfers from one site to another along a corridor, within a specified district or from a corridor to a center.
- Consider adopting density transfers into zoning codes so staff can administer them. Clearly map where the transition is to occur and where the density can transfer to within the adopted code to avoid case-by-case conflicts.
- Density transfer programs can be complicated to implement in smaller jurisdictions or those where developable land outside core areas is more plentiful.
- Carefully consider the architectural and financial issues raised by setbacks as well as current land values in the area to determine whether or not requiring stepbacks will serve as a disincentive to development.
- Coordinate with building codes to ensure they do not compromise preferred ceiling heights for vibrant retail and/or floor-to-floor heights for residential units as allowed in the planning code.

Resources

Code flexibility

For more information on the example approaches, contact or visit:

Hercules Planning Division:
111 Civic Drive, Hercules, CA 94547 • 510-799-8200
http://www.formbasedcodes.org/images/CentralHerculesFBC.pdf

Menu-based code in Seattle, Washington:
Seattle Green Factor http://www.seattle.gov/dpd/Permits/GreenFactor/

Graphic menu-based code in Hayden, Idaho:
Department of Community Development and Planning • 208-209-2021
http://www.hayden.govoffice.com/index.asp?Type=B_BASIC&SEC={B0DCB8B6-AE6F-46EB-942D-D154DB140FE0}

Oregon City residential design standards, Section 17.20:
http://www.orcity.org/community-develop/planning/New_Code/documents/17.20ResDesStd_000.pdf

For more general information on form-based codes, visit:
Smart Growth Online: http://www.smartgrowth.org/library/byldrtype.asp?typ=5'
Form-Based Codes Institute: http://www.formbasedcodes.org/
Local Government Commission:
- "Overcoming Obstacles to Smart Growth through Code Reform"
  http://www.lgc.org/freepub/PDF/Land_Use/sg_code_exec_summary.pdf
- "Form-Based Codes: Implementing Smart Growth"
  http://www.lgc.org/freepub/PDF/Land_Use/fact_sheets/form_based_codes.pdf

Transition zones

For more information on the example approaches, contact or visit:

Hollywood Plan District – Chapter 33.536:
http://www.portlandonline.com/shared/cfm/image.cfm?id=53372
See 33.536 for Height Transition Between Residential and Commercial Zones
See 33.536.235 for Transition Between Commercial Zones

New Columbia:
http://www.hapdx.org/newcolumbia

Cottage housing development code:
http://www.cottagecompany.com/cczoning.html

The David Baker height study:
http://www.dbarchitect.com/images/dynamic/articles/attachment//its_the_ceiling_heights.pdf

For more information on cottage housing, visit:
http://www.mrsc.org/subjects/planning/cottagehousing.aspx

Innovative parking design,
City of Lake Oswego
Photograph provided by SERA

Toolkit

Innovative design and development codes

Managing parking to maximize urban form

Parking largely shapes the region's centers and corridors. The amount of parking provided, its design, and its location affect whether local development results in good urban form in these areas. The regulation and management of parking in centers and corridors can also impact whether these areas experience desired levels of private investment. Parking concerns, both real and perceived, present a major issue for many cities and counties.

Cities and counties throughout the region have modified their codes to encourage compact development consistent with the regional vision expressed in the 2040 Growth Concept. Small-scale regulatory changes that help facilitate shared

parking and increase the flexibility of parking requirements in centers and corridors have reduced built parking and provided incentives for developers to develop compact, mixed-use projects in centers and corridors. These approaches have helped remove barriers to building compact, mixed-use projects in some of the region's centers and corridors. However, not all local governments have seen this vision realized in recent projects.

Minimum parking standards often remain too high for these walkable, mixed-use places and can inhibit new development as the high costs of parking drive up the overall cost of development. Requiring private property owners to provide parking spaces on every lot in centers and corridors is a significant burden and is also detrimental to urban form. At the same time, requiring structured parking is cost prohibitive until land values throughout the region support the compact, mixed-use development that has been envisioned through the upzoning of centers and corridors. The design of some of these parking garages has also had negative impacts on the overall environment of some centers and corridors. However, lowering parking minimums or establishing parking maximums in these areas can increase neighborhood concerns about the potential negative impacts associated with providing less parking.

Establishing a balance that recognizes the concerns of neighborhoods, yet encourages development, is a difficult task. Even if such a balance is attained, developers often face requirements from lenders for parking levels that supersede local parking supply requirements. Lender requirements are based on their estimation of the supply necessary to achieve profits, which is generally calculated from a national average and not local conditions.

A complete solution usually requires the application of both locally tailored parking management strategies and regulations to ensure that parking does not detract from the urban form and supports investment in the region's centers and corridors. Parking supply and demand is a subtle science: there is no such thing as the "right" ratio, and simply providing additional supply to meet a perceived demand is an expensive and never-ending proposition. Many cities and counties are realizing that a longer-term solution is to better understand and manage their existing parking supply, reduce parking demand and provide parking consistent with compact urban form. However, it is common for different divisions within the government to divide the responsibilities for managing and regulating parking supply creating an additional challenge to achieving the right local balance and approach to parking.

If regulations and strategies for managing parking can effectively address parking needs, valuable land in the region's centers and corridors can develop into active mixed uses that enhance the quality of life and design of these areas. Decreasing the amount of land needed to meet parking requirements can encourage more residential and commercial investment at the building, neighborhood and city level, encouraging development in centers and corridors while reducing congestion and increasing public transportation options.

How to use it:

The first step is to understand precisely how much parking is necessary by quantifying the existing supply, both public and private, and the local demand. Once this is understood, management strategies can be employed to efficiently supply parking. Parking management strategies can include centralized parking facilities such as parking garages and lots. They can be built and operated by a public entity or through a public-private partnership. Centralized facilities often enable the elimination of surface parking lots and curb cuts that erode the walkable fabric of mixed-use neighborhoods. Centralized facilities also enable a "park-once" alternative for commercial areas that can reduce on-street congestion.

Providing public centralized parking structures is a tipping point in positively impacting urban form through parking regulations and management. If local governments realize that given their land values they cannot expect developers to provide structured parking and provide parking as a public resource, they can fundamentally change the way centers and corridors are designed. Having centralized parking allows jurisdictions to lower their parking requirements as they are being met off-site. This, in turn, means that they can allow higher Floor-Area-Ratios (FARs) and achieve continuous street frontages. Continuous street frontages are an important component of a pedestrian friendly environment.

Parking management strategies can also include parking benefit districts, which do not necessarily have centralized facilities but meter on-street parking. Those districts or corridors that experience a high demand for parking can capitalize on this demand by dedicating revenues collected to cover the costs of managing the parking district, as well as neighborhood transportation and streetscape improvements, structured parking, and demand management programs. Effective parking management can help distribute parking consumers within and away from prime parking areas while demand management can lower the overall need for parking spaces by promoting transit use, carpooling and other alternative modes of transportation.

It is important to balance the management of supply and demand with parking regulations. Regulatory changes incorporate a wide range of approaches. They present a cost-effective way to change the ground rules for parking and reduce the cost of its provision. Regulations can be applied to ensure that required parking ratios do not result in excessive parking supply and do not hinder development in the region's centers and corridors. Cities and counties can adopt parking maximums that limit the total number of spaces that can be provided. Another approach is to reduce parking requirements by enabling residential projects to "unbundle" parking. By separating the cost of a parking space from the cost of a residential unit, consumers can make different choices. This can also help to reduce the cost of housing and the demand for parking.

Regulations paired with parking management strategies take a dynamic and thorough response to parking concerns in the region. This cohesive approach to providing parking can enhance the opportunity for compact development in our centers and corridors as less land area is required for parking and, therefore, available for development or redevelopment.

The nuts and bolts

Parking supply inventory: Prior to establishing a parking management strategy or amending regulations for a downtown, center or corridor, it is imperative to understand the current supply of parking in these areas by taking an inventory. By conducting this type of parking supply study, local governments can quantify the true existing use and identify which parking management strategies need to be implemented to meet both existing and future demand.

At the beginning of the process, stakeholders should be interviewed to determine the perceived parking needs and problems. Engaging local stakeholders is integral in assessing what the resulting inventory means for the local community and facilitating policy discussions regarding potential parking solutions.

When conducting the parking supply study, both public and private parking spaces should be surveyed in order to gauge the full extent of available supply and develop an integrated approach to meeting the need. Occupancy, duration and turnover should be assessed as part of the survey to establish a better understanding of the parking market throughout the day. Community staff with minimal training could accomplish simple counts, or transportation consultants could conduct a larger, more comprehensive study.

The results of the inventory will provide integral information about the local parking supply and use. It will help determine how many spaces are needed and identify where there are under-used spaces that could be shared. According to Rick Williams Consulting, a good benchmark for occupancy is 85 percent for regular peak hour occupancies, at which point parking management strategies should be implemented to bring peak usage below that level. This type of survey will collect the information needed for management strategies that integrate time restrictions and parking fees for using existing spaces more efficiently.

A survey will also help local governments understand how well local zoning requirements that dictate parking supply match the demand. This information can serve as the basis for amendments to parking minimums or the establishment of parking maximums.

Parking inventory studies are more suitable in limited geographic areas, such as downtown areas, that are highly accessible, whereas these studies might not be as successful in solely auto-based areas. In areas with a complete network of local and arterial streets as well as transit, issues with parking are more localized and easier to study. In areas lacking a complete network and in areas with limited on-street parking, it is more difficult to measure and assess spillover parking.

Existing use of the tool in the region: The cities of Beaverton and Hillsboro recently conducted a parking inventory and study funded by a grant from the state Transportation and Growth Management program.

Example approach

City of Beaverton

Parking inventory

The city found that the high cost of structured parking was inhibiting downtown development. Thus the city wanted to understand precisely how much parking was needed and whether the current surface supply was adequate.

A Transportation Growth Management grant from ODOT and the Department of Land Conservation and Development funded a parking inventory study focused on the Old Town area. The study involved local stakeholders which included daily users of the system. A one-day capacity, utilization and turnover inventory was conducted between 9 a.m. and 6 p.m. It determined how many on- and off-street parking spaces were being occupied every hour and how long those spaces were occupied by individual vehicles.

Beaverton learned that instead of not having enough parking, the city actually had excess parking with only 41 percent of available parking used on average. In response to this finding, specific management strategies were identified and recommended for implementation:

- designating a city parking manager with specified responsibilities
- eliminating time restrictions in city-owned off-street facilities to encourage greater use of public parking lots by business employees and longer-term visitors
- allowing longer-term stays for on-street permit parking outside the core commercial area for employees and residents while establishing short-term only parking rules in the core commercial area for customers
- developing new way-finding signage to direct visitors to off-street locations, initiating higher rates and fines in areas with consistent high rates of use to induce higher turnover
- working with lenders to explain the supply and lack of need for higher ratios of parking.

Regulatory changes were also made: parking minimums were eliminated for commercial development in the core to reduce the costs of development and the proliferation of parking lots in downtown Beaverton. Likewise, the minimum off-street residential parking requirement was reduced to 0.75 parking spaces per unit. Work is in progress to encourage more shared parking agreements. Recognizing that current land values may not be sufficient to attract the desired type of development, Beaverton also proposed a phasing strategy that would allow lower density commercial development to proceed while facilitating higher-density development over time. For example, a 0.60 FAR project with structured parking might start at 0.30 FAR with surface parking and then transition over time.

Since stakeholders were involved from the start, the management plan received strong public support and unanimous approval from the City Council and Planning Commission through a series of resolutions adopting the parking management recommendations.

"Our downtown parking study emphasized observation of actual parking usage. We learned that we currently have a surplus of surface parking, leading us to relax our outdated parking requirements for downtown development. Now we can focus more attention on good buildings, good streetscapes and good businesses and residences and less on acreage of asphalt for parking."

–Marc San Soucie, Planning Commission, City of Beaverton

The nuts and bolts

Structured parking: By using less area to provide parking, garages open up valuable land for other uses. If the public sector can construct centralized parking garages, they can increase Floor-Area Ratios (FARs) and encourage compact redevelopment in centers and corridors making a large-scale impact on the urban form.

Given the measurable impact on surrounding development, most cities and counties want adequate structured parking in their centers and corridors but have the following questions regarding implementation:

- Where to site the parking structures?
- How to design parking garages to mitigate any negative impacts?
- How to fund the construction of parking garages?

Careful attention must be paid to the location and design of both surface and structured parking. Although more convenient and accessible if located in front of buildings, parking facilities should be sited behind buildings to reduce their adverse visual impacts. It is integral to have buildings fronting the street to create inviting entrances that are more pedestrian-friendly.

Innovative design approaches for parking structures are also essential in order to ensure that blank walls do not become the dominant feature of the streetscape. Parking structures can be designed to function as part of an urban landscape. For example, garages can be wrapped with a mix of uses such as retail and office maintaining a continuous street frontage. Garages should also be of an appropriate scale to integrate with surrounding urban forms. When built, the structure should illustrate the lessons learned from David Baker's height study (discussed in the transition zones chapter) and allow minimum floor heights that are pedestrian-friendly and conducive to retail needs particularly on the ground floor. If parking structures are not yet feasible, surface parking should be designed with landscaping around its edges and clearly marked pedestrian connections through the lot to the buildings.

Once parking structures are constructed, it is important to get the pricing correct. The conventional approach in the region is to provide free curb parking. However, on-street parking directly competes with parking garages in meeting demand. Strategic pricing strategies that vary parking costs between different areas can influence consumer choice and help ensure that the valuable public resource of parking is used efficiently and effectively, thus the price of parking in a garage should be lower than the price of on-street parking along the primary commercial arterials. Likewise, parking can be free in more desirable areas except during certain hours of the day with peak usage. A more complex and expensive system can also be developed to vary the prices of on-street parking from one street to the next. This can be further managed by implementing "real-time" pricing in order to make available a certain percentage of parking spaces at all times.

Existing use of the tool in the region: The cities of Portland and Lake Oswego have achieved some success in requiring garages to be lined with mixed-uses. Outside of this region, the City of Boulder, Colorado has received several design awards for the architecture of its municipal parking garages. The parking management agency has wrapped garages in mixed-use structures that are integrated into the downtown both in scale and appearance.

Reducing/removing parking minimums: One of the most cost-effective and short-term ways to improve the impact of parking on urban form is to reduce or remove inflexible parking minimums through a code amendment. Minimum parking requirements can promote inefficient land use and create costs that discourage development in urban areas with higher levels of density and greater land values. By removing the impediment of providing parking at levels more appropriate for suburban, auto-oriented locations, cities and counties can reduce the cost of development and make their centers and corridors more attractive to redevelopment. By removing parking minimums, communities also promote improved urban form. Without being required to provide surface parking, property owners can develop to the edge of their sites building a continuous façade that provides an attractive and urban streetscape.

Codes should be amended to allow for the reduction or removal of parking minimums in areas that are targeted for higher densities in order to attune the zoning language with the vision of growth. Locational and demographic factors can also impact parking demand and justify reduced parking requirements. For example, if a project is well served by local transit and offers amenities to users of alternative transportation modes, there will be a lower parking demand from consumers and the local government can reduce parking requirements on the site.

To encourage desired development types in centers and corridors, reducing parking requirements must be balanced with demand management strategies in order to reduce overall vehicle use and the need for parking. In exchange for a developer commitment to transportation demand management programs such as supporting carpooling, offering subsidies for transit or furnishing bike facilities, a local government can reduce the minimum parking requirements on the site. Fee-in-lieu programs should also be established in order to allow reductions to the minimums in exchange for payment by the developer into a municipal parking or traffic mitigation fund. These fees can help finance public parking structures.

Existing use of the tool in the region: In order to encourage more efficient land use patterns and protect the environment, cities and counties throughout the region adopted new parking minimums for different types of development. The City of Portland has found additional success in removing parking minimums for any development located within 500 feet of a frequently served transit line in all districts of the city.

Parking minimums were eliminated for commercial development in the core of downtown Beaverton

The nuts and bolts

Parking maximums and parking caps: Cities and counties can also revise zoning ordinances to adopt parking maximums. Maximums limit the total number of spaces that can be constructed at any one site. Maximums can complement parking minimums or they can stand alone. A variation on this approach is a parking cap or parking freeze that sets the total number of parking spaces allowed for all development within a particular district.

District-wide parking caps provide flexibility by introducing transferable parking entitlements. Thus parking can be transferred or sold to another development if not used on site. This allows local cities and counties to control the parking supply while letting developers whose projects need less parking benefit by selling their parking spaces or negotiating for shared parking agreements for their employees or customers. Conversely, developers whose projects need more parking can purchase rights.
Under parking maximums or caps, developers may worry about obtaining financing for projects and the long-term marketability of property. However, if all developments within a district and similar development types throughout the region are subject to the same restrictions, the playing field is leveled among developers.

Parking maximums and parking caps are not appropriate at all locations. Appropriate locations include districts with viable transportation options where property values support mixed-use, transit-oriented development. These locations also need to have tenants and residents that are attracted to pedestrian-friendly services and retail rather than to areas and uses with a surplus of parking.

Existing use of the tool in the region: Title 2 of the Regional Urban Growth Management Functional Plan provides the option of implementing customized parking maximums based on local conditions or providing different maximums through a variance considered on a site-by-site basis. Most communities have not varied from the Functional plan requirements to apply local maximums. The City of Portland has set a maximum for new office and retail development downtown at one parking space per 1,000 square feet. This maximum is an entitlement that developers can either build or transfer to another development. Transferable parking entitlements create more flexibility and pose a potential for profit that attracts major developments to the downtown core. Within the Northwest region, the City of Seattle has also achieved some success with implementing parking maximums. Currently, Seattle allows a maximum of one parking space per 1,000 square feet of downtown office space, and the city is considering extending this maximum to other areas outside of downtown.

Example approach

City of San Francisco, California

Unbundling parking

Facing an increase in residential units and structures within the downtown, the city has crafted an innovative parking regulation approach. It has paired parking maximums with separating the cost of providing parking from the other costs of residential development in order to decrease the overall supply and demand.

The city is eliminating minimum parking requirements for downtown housing and looking to reduce minimums in transit corridors throughout the city. A by-right maximum of one space per four units was also established with additional parking allowed if more affordable units are built. The maximum parking ratio allowed is three spaces for every four units with one space per unit allowed for units with two or more bedrooms. Developers are also allowed to use valet or stacked mechanical parking to efficiently manage space.

A project by SOMA Studios has unbundled the cost of parking from the sale of units

Photograph provided by David Baker + Partners

Another important element in the city's strategy is unbundling, or separating, the cost of parking from the sale of units. Developments in the downtown commercial district of San Francisco with more than 10 units must "unbundle" parking from the housing units. Parking is rented or sold separately, rather than automatically included with the purchase price or rental fee of a unit. This decoupling of the cost of parking and housing allows the market to determine the true cost of each based on demand. This, along with the city's parking maximums, encourages and supports public transportation and helps increase housing affordability. A homebuyer can save up to $50,000 on the price of a condominium by choosing not to buy a parking space. Alternatively, residents can purchase a parking space and lease or rent it out. Mandated bicycle parking and spots reserved for car-sharing programs facilitate car-free living and reduce the overall demand for parking.

After initial resistance to the new requirements, developers have realized they can sell parking spaces for more money when they are unbundled from the cost of the unit. Developers are also seeing increased interest from condominium buyers attracted to lower housing costs who are willing to live without a parking space. Furthermore, unbundling parking freed up space for high-quality amenities, adding value to the project. Space that would have been dedicated to parking was instead used for a childcare center and 19,000 square feet of neighborhood-serving retail that included an organic market.

"Buyers aren't obligated to buy a parking space, and developers don't have the incentive to build spaces they can't sell."

– Joshua Switzky, City Planner, San Francisco

The nuts and bolts

The City of San Francisco, California, has eliminated parking requirements for downtown housing and established a by-right maximum of one space per four units. A bonus of additional parking is granted if more affordable units are included in the project. Influencing the San Francisco parking maximums was a national study on the impact of parking requirements on housing affordability by Todd Alexander Litman of the Victoria Transport Policy Institute. Litman found that one parking space increased a unit price by 12.5 percent and two spaces increased the cost by 25 percent. The San Francisco Planning Department concluded that an additional 16,600 households could afford a single-family home if there were no parking requirements, a 20 percent increase in households that could purchase a home. Parking maximums and the elimination of minimum parking requirements altogether has increased opportunities for affordable housing. In addition to increasing affordability, developers are able to include additional units to the project using the money saved from parking.

Unbundling parking: To use a residential parking maximum approach, unbundling parking from residential units also needs to be incorporated into local codes. The code can enable unbundling by right in specific areas or as a condition of approval. It is generally done in compact walkable areas with access to transit service. Where this has been done, developers have realized they can capture a premium on parking that is priced separately from residential units. In addition, there is additional interest from buyers who do not need parking spots and are attracted to lower housing costs. Parking can be unbundled by the facility managers when they rent the building spaces or by developers when selling the building. These costs can be itemized in lease agreements. Lower prices may be passed on in the form of discounts to those renters who use fewer than the average parking spaces. If developers rent the parking spaces rather than sell them as deeded property, then owners are unable to deduct mortgage interest payments from their taxes.

Existing use of the tool in the region: Within the region, the unbundling parking approach was used at the Buckman Heights project located in a close-in eastside Portland neighborhood. The site is located less than a block from transit and within easy walking distance of various employment centers. The developer was able to reduce the parking required and the demand by using a range of strategies including unbundling parking costs. Currently, parking costs vary from $15 to $30 per month depending on whether the space is surface or covered. The project was finished with 58 parking spaces with a ratio of 0.40 spaces per unit. The project was built before Portland eliminated parking minimums for sites within 500 feet of a high-frequency transit line. The Civic, another residential development project in Portland, contains 24 housing units that do not have parking and offers its residents a rental car-sharing arrangement. This tool has also been applied in San Francisco in compact mixed-use districts with great success.

Example approach

City of Austin, Texas

Residential benefit districts

In response to concerns about spillover parking in residential neighborhoods near retail corridors, educational facilities and transit centers with limited parking supplies, a residential parking benefit district was established in Austin, Texas as a pilot program in 2005. The Mobile Source Outreach Assistance program of the Environmental Protection Agency funded the pilot program. The initial benefit district was established in an area with a zoning overlay that aimed to increase residential density.

By metering on-street parking, the benefit district transformed spillover parking into an opportunity instead of a concern. It directed revenue into the neighborhood to construct streetscape enhancements to improve the pedestrian environment as the number of residents within the district increased while using fewer city resources for maintenance and enforcement. The strategy of the program was to reduce the number of people parking and ensure that the neighborhood benefited from those who did park there. To make sure that the neighborhood was supportive of the program, interested neighborhoods had to apply for designation. Residents within a designated parking benefit district are allowed to sell parking permits, creating an additional incentive.

Parking is metered either with traditional parking meters or with pay stations at the periphery of the neighborhood. Revenue is then accrued in a Capital Improvement Project (CIP) fund and put toward improvements that promote walking, cycling and transit use, including sidewalks, curb ramps and bicycle lanes. In addition, parking meters encourage drivers to use alternative modes of transportation by promoting the alternatives through signage. The neighborhood has the opportunity to meet with city staff on an as-needed basis and inform them and the City Council regarding their preferences for future improvements to be funded by parking revenues.

Parking meters serve a dual function collecting revenue for the capital improvement district and advertising alternative modes of transportation, Austin, Texas

The strategy of the program was to reduce the number of people parking and ensure that the neighborhood benefited from those who did park there.

The nuts and bolts

Parking benefit districts: Another alternative that addresses parking supply, demand and pricing issues is parking benefit districts. Benefit districts are centralized in their administration but do not usually have centralized facilities; rather, they meter on-street parking and dedicate revenues collected to neighborhood transportation, parking and streetscape improvements. Improvements can include the placement of utility wires underground, regular street and sidewalk cleaning, installation of benches, improvements to crosswalks, striping, parking enforcement, traffic calming measures, street trees, better lighting and other amenities. Earmarking revenue to directly benefit neighborhoods and giving them input into how funds are spent generates support rather than eliciting concerns over paying for parking that used to be free.

Parking benefit districts also address potential capacity problems through market pricing of on- and off-street parking as well as funding demand management programs. For example, revenues from parking meters can provide commuter passes for downtown employees. This option can be less expensive than building an additional parking garage. Parking benefit districts have been set up most commonly in downtown business districts. Benefit districts have also been used successfully in residential districts as a way to address spillover parking that affects residential neighborhoods adjacent to vibrant, active areas such as centers and corridors.

Sometimes, parking benefit districts have used phased approaches to implementation, rolling out a district over several phases particularly in residential areas. In the first phase, informational meetings can be used in neighborhoods where spillover parking has been identified as an issue, as well as in neighborhoods or business districts that may have expressed interest in such a program. Publicizing these efforts helps gain interest and resolve public concerns. In the second phase, select interested neighborhoods or central, high traffic areas to be included in the benefit district. At this stage, local staff coordinates with residents of the community and business owners to determine the location of meters, maximum times on meters and how to promote any available alternative transportation options. Finally, parking benefit districts can be implemented through the installation of parking meters and public outreach regarding alternatives to driving and parking.

Existing use of the tool in the region: Downtown areas within the region employing parking benefit districts include Beaverton, Hillsboro and Tualatin. However, some of the most advanced benefit districts come from the California Bay Area. San Diego and Pasadena, California, have established successful downtown business parking districts. The City of Boulder, Colorado, has also instituted a very successful parking benefit district. The City of Austin, Texas has piloted a residential parking benefit district that allows neighborhoods to select whether to participate in the program, translating high demand for parking in an area into a benefit to be realized instead of a drawback.

Example approach

City of Boulder, Colorado

Comprehensive, phased parking approach

Boulder's downtown business district developed an integrated approach combining restrictions on parking with aggressive demand management to counter a shortage of parking. A special district, the Central Area General Improvement District (CAGID), was established.

In the downtown, there are no parking requirements for non-residential uses. If developers choose to build less parking, they can purchase permits for public lots, which offers a less expensive option to building parking on-site. These public lots are constructed and operated by CAGID. They are funded with general obligation bonds with the debt being supported primarily by parking fee revenues and taxes paid by property owners.

Boulder began by building surface lots and transitioning to structured parking as the downtown grew and revenues were generated. Now all the garages are mixed-use, and the zoning code specifies design requirements for wrapping parking in pedestrian-oriented uses up to a certain depth on the first and second floors. The city has won several design awards for their 15th and Pearl Street garage which is a five-story garage wrapped with four separate structures that largely hide the garage from street view. The garage's design increased costs with an average of $18,000 spent per parking space for a total of 700 parking spaces.

CAGID also seeks to manage the overall demand for parking in the district, recognizing this approach is less expensive than continuing to build new parking supply. They dedicate on-street meter revenue to provide all downtown employees with a free universal transit pass which reduces the overall need for parking downtown. Forty-two percent of employees use alternative modes of transit freeing up spaces for visitors and customers. All downtown parking meter revenue, which exceeds $1 million a year, is transferred from the city general fund to CAGID.

Award-winning mixed-use garage in downtown Boulder, Colorado

CAGID has also established neighborhood permit parking initiatives to prevent spillover parking from commuters trying to avoid parking charges downtown. Commuters can buy on-street parking permits. These are limited to a certain number per block, and restrictions are enforced with sophisticated methods to ensure low average occupancy rates. The program is designed to be revenue neutral as commuter fees subsidize lower annual resident fees.

The Central Area General Improvement District's objective was to provide parking on a district-wide basis while maintaining a desirable, walkable, vibrant downtown.

Keep in mind

True cost: The true cost of parking is currently hidden and borne by the general public and developers. Making the cost of parking more transparent and shifting the burden to users changes behavior. Unbundling parking can be a successful tool in revealing the true price of parking to consumers and influencing their choices. Parking demand may subsequently be reduced as the cost of parking exceeds what some consumers are willing to pay. Modifying city codes to require the unbundling of parking would create an incentive and not a barrier to development, particularly in centers and corridors. In addition this may be a more equitable response to managing parking supply and demand. Linking prices with consumption can lead to more rational decisions and opportunities for reducing vehicle ownership, which will in turn lead to more walking and transit use.

Lowering costs: Lowering the requirements for providing parking and separating parking from the price of housing creates significant savings for development projects. This can translate into more affordable housing and more mixed-use development in targeted areas. With lower parking requirements and lower parking costs, there is an increased ability to develop in an infill area. In response to lower parking requirements and costs, a long-vacant one-acre lot in downtown Beaverton was finally developed as a mixed-use project. The City of Hillsboro had a similar experience with a one-acre site by the MAX line where the developer, armed with data to support less parking, was able to make the project financially feasible once the parking requirements were lowered. Parking benefit districts also lower costs to individual development projects by providing funding for parking structures and programs for managing parking supply and demand in centers, corridors and transit station areas.

Public involvement: Quantitative information from parking study inventories is helpful in addressing questions and perceptions about the local parking supply. It is essential to involve stakeholders early in the process if there will be any changes to regulations or management policies. It can be even more helpful to engage community members through the process of evaluating the existing supply and assessing existing and future demand. The results will provide clear and quantifiable numbers to serve as the basis for policy discussions. Involving stakeholders throughout the process will help build support for formulating and implementing specific parking policies that support the findings of the local parking inventory.

Local management: Conducting an inventory of the supply is an essential first step to quantify the true extent of the local problem, facilitate community involvement, and build the framework for changes in city codes and policies. Data gathered through parking study inventories can help quantify the existing supply versus demand, as well as strategies for future consideration.

Strategies that seek to manage the parking supply or demand entail a certain level of investment from local governments to determine how to fund capital investments and how to implement and manage programs long term. Regulations provide a cheaper approach to addressing parking concerns for localities without the capital resources to implement parking programs. That said, the regulatory approach still requires amendments to the code, which must have political and public support. Preparing an inventory of the supply can help overcome opposition by providing concrete numbers to make the argument for code changes.

Some parking management strategies, particularly centralized facilities and "real time" pricing, may require capital investment upfront and funds for long-term management and maintenance. These costs make this approach more realistic for local governments with significant resources or access to financial incentives. However, jurisdictions may consider less costly approaches such as setting rates higher in more dense, active areas and setting lower rates (or eliminating rates) in adjacent areas.

Funding: A significant benefit of parking districts is the revenue collected, which can be directed toward bond payments for centralized municipal parking garages or other local transportation infrastructure improvements. Charging for parking not just during working hours but also on the evenings and weekends can further increase this revenue. This strategy avoids the need to use general resources to make debt service payments.

Lender requirements: Lowering parking requirements will not necessarily change strict lender requirements. Lenders recognize that parking can be a critical component of new development and can require a developer to deliver parking spaces beyond that required by the city. Local governments should work with developers to provide information about the local parking supply and the consistency of regional parking standards to lenders unfamiliar and uncomfortable with the local requirements.

Incremental approach: If local governments do not have the capacity to implement parking regulations and management approaches, or if they have lower land values that preclude structured parking, an incremental approach with a phasing strategy can be applied. This approach will allow suburban communities to allow lower density development to proceed while laying the groundwork to facilitate higher density development over time.

An essential first step is conducting a parking inventory of existing supply and demand. Following this initial step, local governments can reduce parking requirements for centers and corridors and then implement management programs in order to use the existing supply of parking more efficiently. Parking benefit districts can be established to address concurrent concerns regarding potential spillover parking. One or more pilot neighborhoods can be established, and as neighboring blocks see the visible results of the district they can elect to be included in the program. In addition, cities and counties should consider the potential for revenue collection in order to fund demand management programs, local improvements and centralized facilities in later phases of the implementation of a comprehensive parking regulation and management approach.

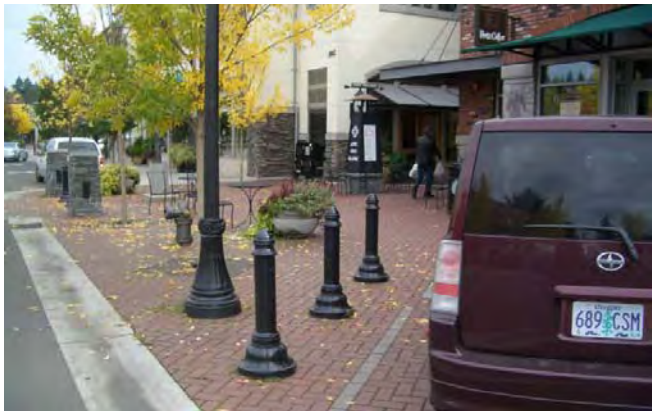
Finally, local governments should examine how to reduce the cost to developers of providing parking through amendments to regulations such as unbundling parking or employing other city incentives or subsidies. Local governments should also analyze how and where to construct public parking garages to facilitate higher density development.

Putting it together

Modifying parking regulations to reduce parking ratio requirements, allowing or requiring the unbundling of parking and increasing shared parking opportunities in centers, corridors and transit station areas helps remove financial barriers to development in these areas. Coupled with parking demand and supply management programs, local governments can promote more affordable housing opportunities and enable development consistent with more active mixed-use, multi-modal communities.

Conducting an inventory of parking supply and demand is an essential first step in order to quantify the true extent of the problem, counter perceptions and understand the local nuances of parking use. Parking supply studies can also facilitate community involvement and build the case for changes to city code and policies as well as new management programs. Demonstrating that lower parking requirements are supported by local supply and management programs can also help convince lenders to change their parking standards. This allows additional infill opportunities in centers, corridors and transit station areas and more compact development patterns consistent with the vision of the 2040 Growth Concept.

Techniques that make consumers aware of the true cost of parking are relatively new. Yet these approaches, combined with approaches that implement time and price variables, may have higher rates of success in changing parking behavior because they allow users to make individual economic choices. Simply providing additional supply to meet perceived demand is not a sustainable practice, but linking price with consumption can lead to more rational decisions and a reduced demand for parking.



Tips for implementation

- Quantify the existing supply through a parking study to develop accurate local data and develop recommendations for city policies and management strategies based on the results.
- Develop phasing strategies for parking management to work toward the long-term goal of higher density even if the market does not currently exist.
- Build public support for the recommendations to ensure an engaged constituency that will stay involved long-term.
- Implement strategies that collect parking revenue in order to fund on-going supply and demand management programs.
- Earmark parking revenue funds to directly benefit the local neighborhood; invite their input in how funds are spent.
- Allow neighborhoods to elect to be a parking benefit district to ensure residents support the program.
- Modify codes to allow or require the unbundling of parking to increase the supply of affordable housing.
- Reduce parking minimums to decrease development costs associated with providing parking.
- Set aside staff time to write and approve code amendments to ensure that recommendations are implemented.
- Manage local parking supply by distributing users through price variations and time limits for different areas.
- Partner with developers to explain local parking requirements to lenders and highlight successful developments in the region with less parking.
- Pair these strategies with existing and planned transportation infrastructure improvements in order to build a strong multi-modal transportation network and assure long-term success in managing parking.

Resources

For more information on the example approaches to parking management strategies, contact or visit:

City of Beaverton
Planning Services Division
Beaverton City Hall, CDD—second floor
4755 SW Griffith Drive, Beaverton, OR 97005 • 503-350-4037

City of Austin
Neighborhood Planning and Zoning Department
PO Box 1088, Austin, Texas 78767 • 512-974-2856
www.ci.austin.tx.us/parkingdistrict/default.htm
www.epa.gov/airnow//2006conference/wednesday/Larsen.ppt

City of Boulder, Colorado, Parking Program
www.downtowndevelopment.com/pdf/DowntownBoulderCategoryIIIS.pdf

The Non-Profit Housing Association of Northern California
www.nonprofithousing.org/actioncenter/toolbox/parking/unbundling.html

For additional resources to manage parking to maximize urban form, visit:

The Boston Metropolitan Area Planning Council
"Sustainable Transportation Toolkit: Parking"
http://transtoolkit.mapc.org/Parking/index.htm

Donald Shoup, author of *The High Cost of Free Parking*
http://shoup.bol.ucla.edu/

Environmental Planning Agency
"Parking Spaces/Community Places: Finding the Balance through Smart Growth Solutions" www.epa.gov/dced/pdf/EPAParkingSpaces06.pdf

State of Maryland: Governor's Office of Smart Growth
"Driving Urban Environments: Smart Growth Parking Best Practices"
www.smartgrowth.state.md.us/pdf/Final%20Parking%20Paper.pdf

Victoria Transport Policy Institute
"Parking Management: Strategies, Evaluation, and Planning"
www.vtpi.org/park_man.pdf

Municipal Research and Services Center of Washington
"Downtown Parking Solutions"
http://mrsc.org/Subjects/Transpo/Tpark/transsolut.aspx

Redwood City Community Development
PO Box 391, 1017 Middlefield Road, Redwood City, CA 94064-0391
650-780-7379
http://www.redwoodcity.org/cds/redevelopment/downtown/parking.html

An example of using 3-D tools to help a community visualize zoning and make policy decisions.

Photograph provided by Fregonese Associates

Toolkit

Innovative design and development codes

Visualizing zoning

Complicated, multi-faceted codes and planning documents can be difficult to explain to developers and the general public, making it challenging to articulate a clear vision for future growth that can be rendered in built form. Urban design plans, form-based codes and illustrative code guides, along with the advent of new 3-D video and visualization technology, is changing this dynamic. These tools have been applied to areas as small as a site, block or street, to areas as large as 2,000 acres. Clearly the potential of these tools is just beginning to be understood, but the need for them is obvious: when used they can facilitate more informed decision-making and a greater level of excitement and awareness of the planning process.

The nuts and bolts

Often urban form is not understood until a development application is presented. This creates a problem when neighborhoods, developers, architects and city planners clash over unexpected results at the approval stage, which is usually too late in the process to effect meaningful change. Providing a clear picture of a code's intent can smooth project approvals and be used to create better codes. The ultimate goal is to make existing, new or amended codes easier for developers and designers to understand what is expected, easier for neighbors and the public to engage in the process of review and easier for staff to administer.

Compounding the need for better understanding of urban form is the complexity inherent in compact, mixed-use areas. Conventional, land use-focused codes are not focused on or explicit about desired urban form in these areas. These types of codes do not illustrate what types of buildings, streets or open space are desired and how these connect. Instead, the focus is limited to what land uses are allowed in which areas. Furthermore, they use abstract, difficult-to-understand formulas such as Floor Area Ratio (FAR) and do not translate these formulas into potential urban forms. There are newer, more innovative codes that focus on the form communities want to achieve and, as a result, enhance understanding among the various stakeholders creating a smoother public input and review process. New visual tools have also proven extremely helpful in translating existing codes, involving the public more effectively and guiding infrastructure investments and improvements.

How to use it:

Urban design plans: An urban design plan is an urban form-focused planning effort intended to transform the vision for an area into reality. It is usually comprised of equal parts planning, urban design, investment strategy, development and design code, and action items. Since it deals with all the aspects of an area, from public improvements to private development, an urban design plan can bring together property owners, neighboring residents and public infrastructure providers while providing a better understanding and more predictable sense of how new development will be built. Urban design plans are particularly useful for areas where local governments want to target investment, such as centers and corridors, because it brings all the aspects of planning, placemaking and infrastructure improvements together at the same time.

Urban design plans can serve as the bridge between planning and its translation into the local municipal code. Urban design plans can test existing or proposed zoning code provisions by illustrating their character and scale in order to ensure the zoning code text will support desired urban forms. Similarly, their strength at articulating a cohesive vision offers a more flexible implementation of objectives that still meet the vision. This is particularly important if unanticipated market trends occur or public funding availability becomes limited.

Once developed, an urban design plan can be used to guide infrastructure investments and improvements by different departments within the local government. Involving departments such as parks and public works will help inform the design of areas within their control making design and planning solutions more comprehensive and proposed improvements more likely to be implemented. Internal coordination can link planning efforts with specific capital projects and funding sources.

Example approach

City of Portland

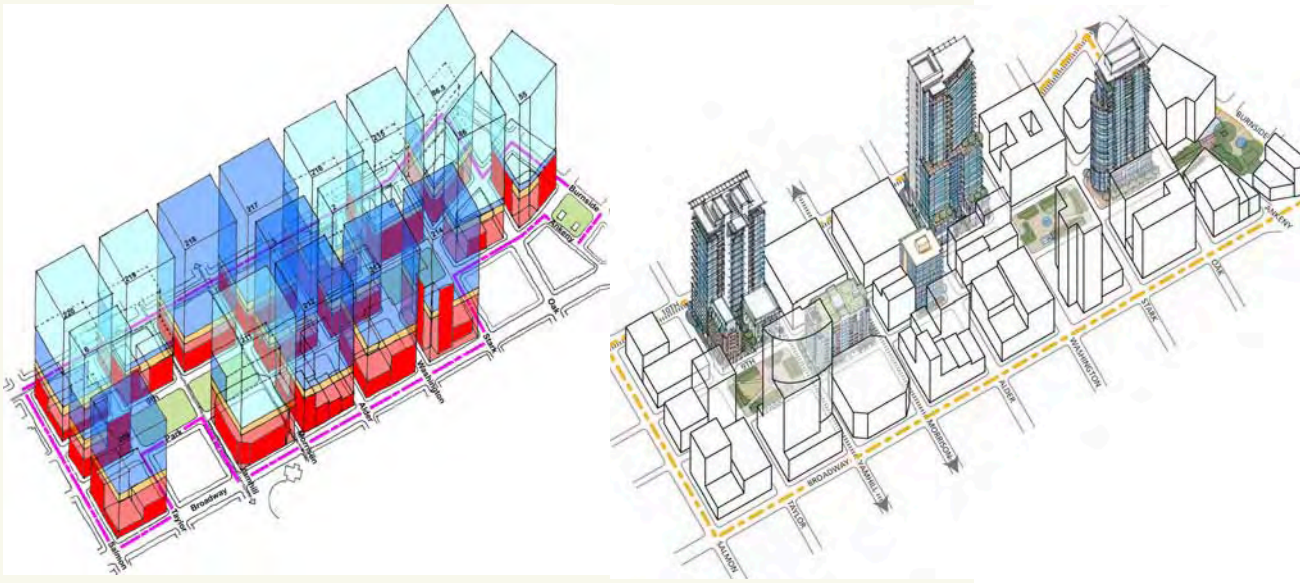
Urban design plan

In 2001, the city initiated a process to develop an urban design plan for the area between the Central City's North and South Park Blocks. The Midtown Park Blocks Urban Design Plan provided a framework for translating the ideas of an outside panel of experts in real estate investment, downtown retail and urban design into specific actions. This framework included an investment strategy, a retail investment agenda, historic preservation guidelines, a new set of design guidelines and new street standards. As a result of the plan, the city decided to retain existing buildings and incorporate small-scaled open spaces and green street design to link the North and South Park Blocks.

A follow-up project, the 2002 West End Plan, updated zoning and development standards to complete the district vision. As a result, the plan influenced a property owner to rethink his approach to historic buildings that he owned and to work with the city to dedicate a strategic block of his property for a public park. Some of the plan funding even came from the property owner. The city's urban design group, a division of the bureau of planning, subsequently produced the 2004 Park Avenue Vision.

The city's planning bureau has been extremely successful in linking long-range planning efforts to capital improvements carried out by other city departments, as well as coordinating the separate projects of parks, environmental services and traffic bureaus to achieve a larger vision. This plan, for instance, linked the Park Block 5 site improvements with new street standards and streetscape improvements for the area.

The city's planning bureau has been extremely successful in linking long-range planning efforts to capital improvements carried out by other city department in order to achieve a larger vision.



Urban design plan for the Midtown Park Blocks, City of Portland Images provided by SERA

The nuts and bolts

The scale at which analysis is performed for an urban design plan can make a difference in the success of the outcome. Urban design plans for a neighborhood center of a large city or for a downtown in a small city would have the most success as the scale of these areas is similar, generally less than 1/4 mile square. Plans prepared for larger areas face the challenge of developing a compelling and cohesive vision that can be maintained over time. Additionally, they require higher levels of coordination with more stakeholders. A plan prepared at the correct scale will be more comprehensible and discrete and therefore have a greater chance of successful execution.

Similarly, urban design plans need to work from a vision that looks far enough into the future to spark the public's imagination, yet close enough in time that actual projects can be identified and implemented. Most urban design plans look at a vision that will be implemented over a span of 20 years. An urban design plan often culminates in a highly public process such as a charrette, design workshop or expert panel, which can help create additional long-term support and advocates for its implementation.

Existing use of the tool in the region: To date, the City of Portland has developed several urban design plans and seen varying levels of implementation. These include the Pearl District, South Waterfront and the Convention Center/Lloyd District. Many of Portland's urban design plans include a number of separate projects to be carried out over time by different bureaus, but coordinated by an urban design vision and investment strategy. The city's bureau of planning has been very strategic in directing planning efforts toward infrastructure investments, capitalizing on investment opportunities and ensuring that capital improvements are consistent with an overall district vision.

3-D modeling: 3-D tools are frequently used in an urban design plan as the basis for analysis. Although they cannot substitute for the in-depth design analysis and collaborative process engendered in such a plan, 3-D visualizations are very helpful to communicate the vision of an urban design plan. These 3-D tools are frequently used to test and illustrate concepts and support the in-depth design analysis and collaborative process. The use of 3-D tools can be more easily and widely disseminated than prior hand-drawn efforts given the tool's capability for a web-based interface. There are a variety

Figure 1. Base Heights

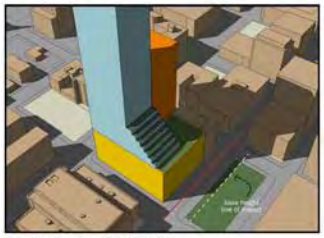


Figure 2. Tower impact on Open Space

Figure 3. Maximum height massing showing no additional impact on initial line of impact

3-D shadow studies for the Portland Art Museum, City of Portland. Images provided by SERA

of tools that utilize new 3-D drawing software such as SketchUp and Flash. The tools include 1) 3-D models that measure development capacity on a site, block or district scale; and 2) 3-D models combined with video to create virtual flyover views of proposed plans and codes.

Any municipality could use these tools for different types of planning processes. During the brief period of time the software (such as SketchUp) has been available, the 3-D technology has been employed for a wide range of projects. They have been used at the scale of a downtown to that of an urban expansion area, and at all points along the planning timeline from a concept plan to a master plan. A common reason to use these tools is to engage participants in the planning effort and create excitement. These models can also help test adopted development code requirements and inform proposed code changes to ensure they support the desired development types and patterns envisioned by a community.

Example approach

City of Hillsboro

3-D model

The City of Hillsboro has used a variety of visual tools to communicate key land use components of a concept plan for approximately 2,000 acres south of Hillsboro. They included a visual preference survey and a simple 3-D model. Alpha Community Development, a consultant to the city, developed one of the more innovative tools: "South Hillsboro: The Movie." This virtual flight through the future South Hillsboro provided a 3-D computer simulation model featuring sustainable neighborhoods, a thriving town center, and tranquil open spaces. Videos created with Google Earth and SketchUp software incorporated the concept plan into high-resolution aerial photographs of South Hillsboro, allowing exploration by the client and the public of what is on the ground now and what could occur.

"The 3-D model and video allowed people to 'fly over' parks and schools, 'walk' through town centers and get a better understanding of the 'urban fabric'."

–Ric Stephens, Lead Consultant, Alpha Community Development

The nuts and bolts

During comprehensive plan updates, proposed zoning can be illustrated providing staff planners, property owners, developers, planning commissioners and the public with a clear idea of what is allowed versus what is being proposed. The software can be set up to allow easy modifications so that alternative zoning proposals can be considered. Very simple, quick models can also be created to illustrate allowed or proposed height, FAR and site coverage. With more analysis and some site and building designs, models can show development capacity that results after other factors are accounted for, including bonuses, parking, landscaping, access and other requirements.

Existing use of the tool in the region: To illustrate a concept plan for a 2,000-acre urban expansion south of Hillsboro, the city produced a virtual flight using 3-D models and video. Portland is currently exploring how GIS and 3-D modeling tools can be combined for updates to its Central City Plan and Comprehensive Plan in order to evaluate how current zoning can be modified to produce better urban design.

Building prototypes: Building prototypes start with a 3-D base model and then add more detail into the model to describe an actual building type that can be replicated or adapted for different zoning and urban design contexts. Simple building prototypes are 3-D models molded to show massing, orientation, floor levels and even simple architectural components, such as openings and roof shapes. More complex building prototypes can also be built with photorealistic buildings placed into a photograph of the actual site in order to demonstrate "before" and "after" views of potential redevelopment. Building prototypes can also be linked to a design analysis, such as a shadow study, or a financing or market feasibility analysis.

The greatest advantage of 3-D building prototypes is that they allow the user to test actual development proposals as well as the parameters of existing code. Prototypes of development that integrate information about parking, height and use requirements can be paired with economic information such as rent, lease or sales prices or the costs and fees associated with construction to generate an interactive and easily understood model of the associated costs and risks of a specific proposal. This interactive model is easier to understand and explain than the spreadsheets typically associated with a pro forma analysis. Three-dimensional building prototypes also allow users to explain how changes in the pro formas are reflected in changes to the built form.

Existing use of the tool in the region: Prior to enacting amendments to its multi-dwelling zones, the City of Portland undertook an effort to document specifically why new multi-dwelling developments were not meeting city objectives for design quality. A prototypes study developed several housing types to illustrate solutions for common infill design challenges while providing building types that would meet city regulations and be feasible from a market perspective. Outside of the region, El Centro, California, used 3-D photorealistic building prototypes to illustrate preferred building types on a block-by-block basis in a downtown setting. These building prototypes were linked to financial information to determine whether the preferred building types were feasible in the plan district.

Example approach

City of El Centro, California

3-D building prototypes

In October 2007, the Southern California Association of Governments (SCAG) provided funding and planning services to support a Downtown Master Plan for the City of El Centro. The effort, led by a consultant, included a series of 3-D visualization components.

A Visual Preference Survey was used initially to identify community preferences regarding architectural style, land uses, building scale and setbacks, parking areas, surface finishes and other design elements. Results led to the development of six building prototypes that reflected existing structures downtown: 1) two-story mixed use residential; 2) four-story mixed use residential; 3) mixed use rehabilitation; 4) two-story mixed use office; 5) four-story mixed use office; and 6) restaurant and hotel.

A Tipping Point Analysis then analyzed the financial feasibility of the preferred building prototypes, focusing on the interaction between the regulatory system and the market. The model (a large spreadsheet) considered a range of code factors such as parking, height and use requirements, area construction costs, and fees. A key finding of the study demonstrated that many desired building prototypes were not feasible in the downtown area because of current zoning regulations, with off-street parking requirements as the biggest single barrier. In addition, the study determined that cost-effective building prototypes downtown would need a floor area ratio (FAR) of 2.5 or higher, more than the current zoning limit of 1.5 FAR.

The city adopted the Downtown Master Plan and has committed to amending the code in 2008.

A key finding of the study demonstrated that many desired building prototypes were not feasible in the downtown area because of current zoning regulations.

3-D visualization components identified community preferences and demonstrated financial feasibility, El Centro, California Images provided by Fregonese Associates

Example approach

City of Portland

"The housing prototypes are part of a focus on promoting desirable design, rather than simply regulating against 'bad' design. Instead of a 'thou shalt not' approach, the prototypes provide solutions and highlight design that builders can do to achieve better infill design."

– Bill Cunningham, Infill Design Project Manager, City of Portland Bureau of Planning

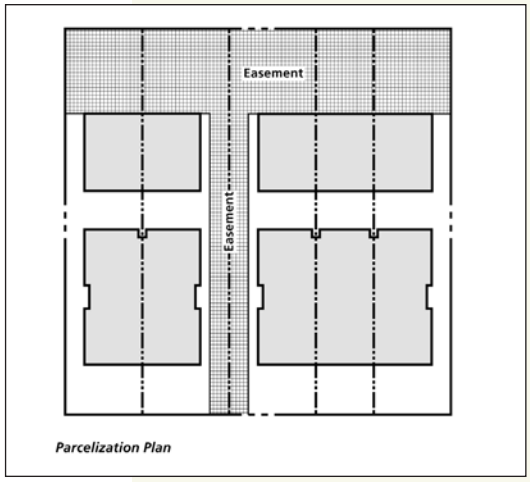
Multi-dwelling building prototypes

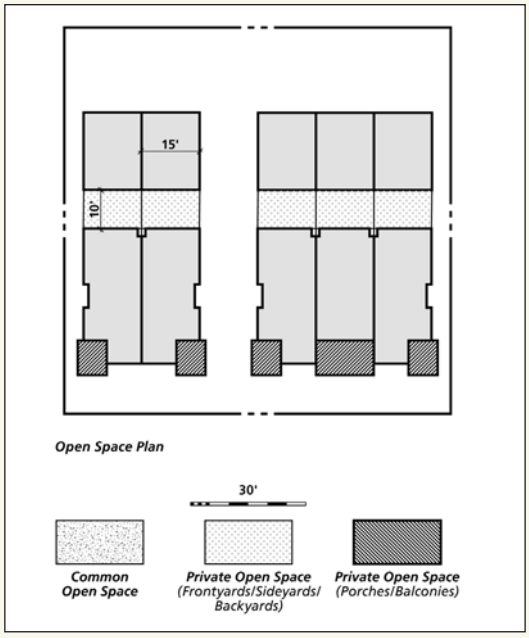
In 2004, prior to enacting amendments to its multi-dwelling zones, Portland undertook an effort to document specifically why new multi-dwelling development was not meeting city objectives for design quality. It was also initiated to provide examples that would contribute positively to the neighborhood context.

The city commissioned a consultant team to develop a collection of housing prototypes to illustrate solutions for common infill design challenges. The challenges included balancing parking needs with pedestrian-friendly design and providing usable open space while achieving density goals. The prototypes were required to be suitable for common infill site configurations, meet city regulations and design objectives, and be feasible from a market perspective. Typical sites from different parts of the city were selected for testing, including from the streetcar-era neighborhoods west of 82nd Avenue and from the area east of 82nd Avenue.

The housing prototypes used dimensioned plans, 3-D models (including models showing the prototypes in context) and photographs of desirable housing examples from in and outside the region. Informed by the prototype study, code amendments were adopted in 2005 to promote the resulting design types. These amendments included code changes to support pedestrian-friendly street frontage, facilitate rear parking, facilitate courtyard housing and alternative housing arrangements, minimize impervious surface area and provide additional flexibility for reducing front building setbacks.

In 2006, the *Portland Infill Design Guide: Housing Prototypes, Multi-dwelling Zones* was produced to serve as a resource to developers, designers, city staff and the general public to broaden awareness of the design types and code amendments.



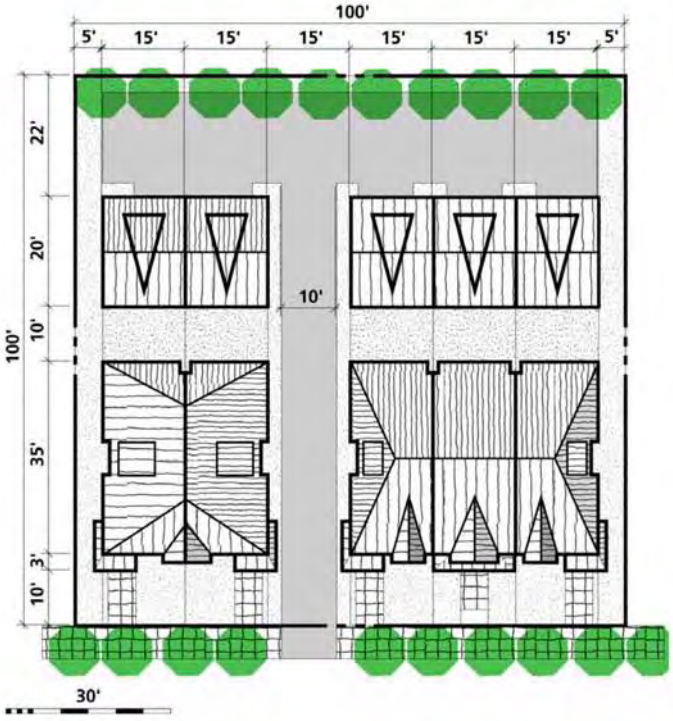


Illustrations from the Portland Infill Design Guide: Housing Prototypes, Multi-dwelling zones, City of Portland

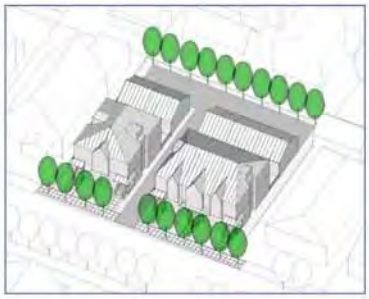
Contextual Rowhouses

100' X 100' Site, R2 Zone

Prototype **1c**



Site Plan



Site Axonometric View

- 5 rowhouse units (1,050–1,300 sq.ft each).
- Massing intended to blend with surrounding single-family context.
- Parking in detached garages to the rear of each unit, accessed by alley easement.
- Small private gardens between each unit and the garages.
- Additional square footage is possible if living space is added in a full third story or above garages.

Precedents

Neighborhood Context

R2 Zone | 10,000 SF Site | Inner Neighborhood | **Contextual Rowhouses**

HOUSING PROTOTYPES | **MULTIDWELLING ZONES** | September 2006

PORTLAND INFILL DESIGN GUIDE

The nuts and bolts

Urban form focused codes: As described in the contextual design section, a form-based code moves away from being a land use-focused code toward a simpler, more urban form-focused approach. A form-based code dictates urban form through development standards that are linked to a regulating plan. This regulating plan is similar to a zoning map, but places less emphasis on land uses and more emphasis on the building shape, street design and neighborhood character in each zone. Due to this emphasis, form-based codes are an extremely effective way to visualize zoning. Implementing form-based codes can greatly reduce discussions focused on the meaning of zoning terms and arguments over how to interpret code language. Pictures are clear and easy to understand leaving discussions to focus on how places appear rather than how they are regulated.

Form based codes are vastly different from most conventional codes. During development and adoption, significant time and budget will need be set aside to train staff not only on the content of the code but also on how to interpret the urban design and architectural principles of the document. Staff authority to make some case-by-case judgment and an understanding of urban design and architecture is critical. A number of cities that have adopted a form-based code have also had success in using a "town architect" to administer their new code. A "town architect" is essentially a staff person or outside consultant who manages the more discretionary aspects of the code.

Existing use of the tool in the region: Form-based codes have not been widely implemented in Oregon. Several cities around the country have successfully integrated form-based codes into existing codes with Petaluma and Hercules, California, being the most commonly referenced.

Code guides: Local governments looking for an economical "quick fix" for a complex code that already exists, or for an interim step prior to amending or rewriting their code, can also create an explanatory and visual guidebook. The purpose of this guide is to demystify the zoning code for the benefit of users, primarily for neighborhood representatives but also for designers and developers. In addition to providing user-friendly graphics of the types of buildings and forms that result from different zoning regulations and overlay requirements, these documents provide information about how to determine what may be built on a specific site or where a specific use may be located.

Existing use of the tool in the region: There are no examples within the region of code guidebooks. A very successful example outside the region is the City of New York's user-friendly zoning guide that is made available to all elected officials and members of community boards. The guidebook provides a comprehensive graphic outline of the entire content of the city's complicated and difficult-to-use zoning code.

Example approach

City of Petaluma, California

Form based codes

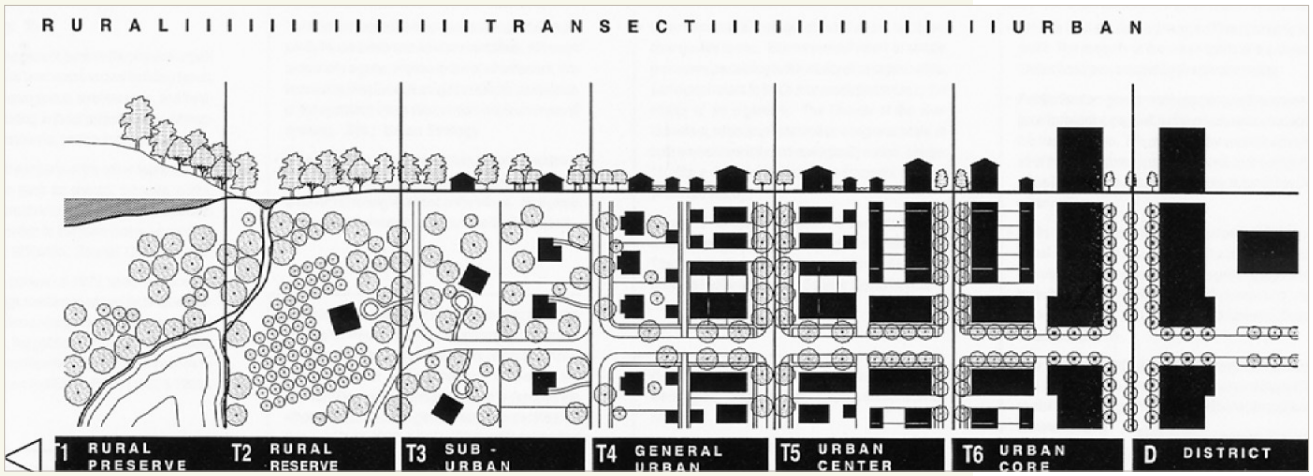
The City of Petaluma developed a form-based code for 400 acres of underutilized land in and near its downtown. As a form-based code, the Petaluma Smart Code goes beyond conventional zoning's focus on use to address urban form. The code prescribes urban form components such as block sizes, site coverage, building frontage, spatial relationships and other physical features. It coordinates the design of the public realm with the design of private buildings.

Building placement and street façades are regulated based on eight frontage types. By allowing a mix-and-match approach for the different components (frontage types and site coverage, for example), the code allows several different approaches for any site. At the same time it ensures more predictability, because every component is illustrated and defined. The focus of the code is on the scale and character of the components and how they connect to one another and affect the pedestrian environment rather than on architectural style.

The City of Petaluma's code is modeled on the SmartCode developed by Duany Plater Zyberk which is meant to be customized locally. The City of Petaluma used the SmartCode to develop their code, which incorporates zoning, subdivision regulations and certain urban design standards into one document.

"The Petaluma Smart Code is doing exactly what it was meant to do when it was adopted. It brings predictability to the community so they know what to expect and they've been happy with the outcome."

-Matt White,
President of Basin Street Properties



Transect from form-based code, City of Petaluma, California

Images provided by Duany Plater-Zyberk + Company

Example approach

City of New York, New York

Visual zoning handbook

The New York City Department of Planning designed a manual that translates its complex and antiquated zoning code into accessible, user-friendly 3-D renderings of sites throughout the city. The guide summarizes regulations for each zoning district, pairing photographs and illustrative graphics with concise explanations to illustrate the typical building forms they are likely to produce. For each district, the dimensions of new buildings permitted by zoning are also described including the overall square footage as determined by the floor area ratio (FAR). This is accompanied by example zoning analyses that illustrate the way in which the use, bulk and parking requirements of a zoning district further guide the development of a typical building in that district.

East Village

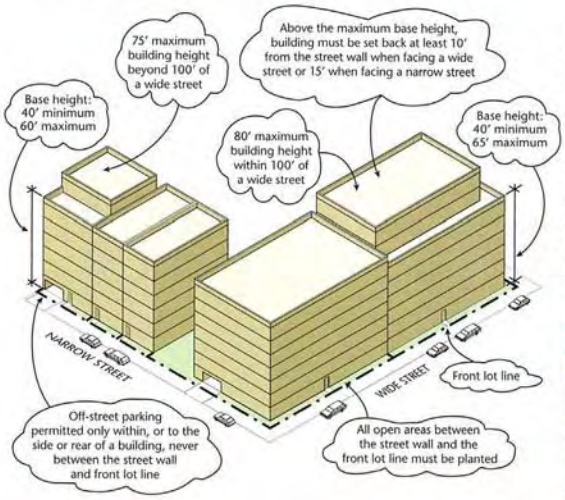
Washington Heights

R7-1 & R7-2

Quality Housing Option

The optional ***Quality Housing*** regulations in R7 districts produce lower, high ***lot coverage*** buildings set on or near the ***street line***. With ***floor area ratios*** that are equal to or greater than can be achieved in ***height factor*** buildings, the optional Quality Housing regulations produce new buildings in keeping with the scale of many traditional neighborhoods in upper Manhattan and the west Bronx, as well as sections of Queens and Brooklyn.

The R7 optional bulk regulations for buildings on ***wide streets*** outside the ***Manhattan Core*** are the same as those in R7A districts. The maximum FAR is 4.0 and the ***base height*** before ***setback*** is 40 to 65 feet with a maximum building height of 80 feet. The maximum FAR for buildings on ***narrow streets*** and within the Manhattan Core is 3.44, and the base height before setback is 40 to 60 feet with a maximum building height of 75 feet. Under the optional regulations, parking is required for 50% of the dwelling units in both R7-1 and R7-2 districts. Parking is waived in R7-1 districts if five or fewer spaces are required and in R7-2 districts if 15 or fewer spaces are required.



West Village

R7 Quality Housing Option

R7		FAR (max)	Lot Coverage (max)		Base Height (min/max)	Building Height (max)	Required Parking[3] (min)
			Corner Lot	Interior/Through Lot			
	Wide Street[1]	4.0	80%	65%	40–65 ft	80 ft	50%
	Narrow Street[2]	3.44			40–60 ft	75 ft	

[1] *Outside the Manhattan Core.*
[2] *Includes the Manhattan Core.*
[3] *In R7-1 districts, waived if 5 or fewer spaces required; in R7-2 districts, waived if 15 or fewer spaces required. On zoning lot 10,000 square feet or less, 50% in R7-1 districts and waived in R7-2 districts; on zoning lot between 10,001 and 15,000 square feet, 30% in R7-2 districts.*

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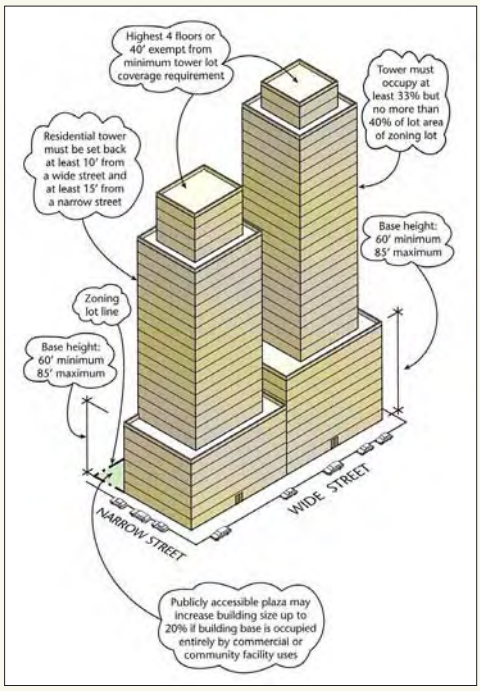
Excerpt from the New York City Zoning Handbook, New York Department of City Planning

The handbook also includes an illustrated glossary of planning and zoning terminology as well as a guide to the existing zoning ordinance. It explains how the ordinance's text is organized, how to read zoning maps, how to determine what may be built on a specific site, and where a specific use may be located. This section also outlines online resources for the zoning text, amendments and maps. The guidebook details recent changes and updates to the zoning code and clearly describes new special districts that have enhanced zoning to preserve and promote certain uses and qualities.

The 2004 edition is an update to a 1973 handbook, originally created to inform neighborhood leaders about the zoning ordinance. The handbook is 139 pages long and costs $24. It may be ordered online through the City Planning Department web site listed at the end of this chapter. The book is also available in public libraries and at the Department of City Planning bookstore. It is distributed to elected officials and all community boards to assist them in their land use review process.



"Zoning should be intelligible to all New Yorkers, not just to land use specialists and zoning experts. It is our purpose to make zoning more accessible – to help New Yorkers understand the basic concepts of zoning and how to apply them. The handbook can be helpful to both the novice and the professional but it should not be used as a substitute for the Zoning Resolution itself. When in doubt, consult the Zoning Resolution. Above all the handbook is intended to help the citizens of New York understand and participate in the planning process." – NYC Zoning Handbook

"The multi-volume Zoning Resolution is like hieroglyphics, known only to the priests of zoning. Opening the Zoning Handbook is like discovering the Rosetta Stone."

– Prof. Ross Sandler, director of the Center for New York City Law at the New York Law School in Manhattan, as quoted in *New York Times*

Keep in mind

Public involvement: Flexible visualization tools can engage the public, property owners, developers, and staff early in the design process and generate plans that reflect realistic development potential. When such tools are used to engage stakeholders early in the process, they smooth subsequent project approvals as everyone is more informed about what to expect from the planning effort. Using building prototypes and related tools can also be very useful in developing a common language of clear-cut design elements for common building "types." According to City of Hillsboro planning staff, the South Hillsboro video was a very effective tool for engaging citizens in the concept planning process.

When using these visualization tools to better communicate with the public careful consideration must be put into the content of the resulting products. It can be relatively simple to produce 3-D models that show development allowed by Floor Area Ratio, site coverage and height. However, the resulting massing can create unnecessary alarm for adjacent neighbors and the public. Construction limitations, parking requirements, property ownership and other factors that limit development must be factored into the presented product in order to reflect realistic development potential. This level of effort may seem like a disadvantage, but 3-D modeling tools provide far more definitive visual information about the development of a site or neighborhood than has ever been possible before. Therefore the level of effort needs to be commensurate with the benefits to be realized.

Building prototypes and photo visualizations can also look too "finished," giving the impression that decisions about building design have been set even though the project is in the planning stage. Some plans have achieved the right balance by combining sketchy-looking building models with photo examples of architectural options. These methods should be paired with improved public communications to discuss the content of the development code. Such an investment into building understanding and support up front will save time later when the code is applied to specific projects.

Local management: New tools require a certain level of skill which, if not available locally, will entail a certain cost to outsource. Urban design expertise is necessary, either on city staff or through outside consultants. Local governments often engage outside urban design or charrette specialists to conduct a high-profile public event with staff following up with amendments to the code. Other cities have focused on adding urban design expertise to their planning or community development departments in order to conduct more urban design in-house.

3-D modeling requires a high-level of skill with computer applications, or the capacity to receive training to use programs such as GIS and SketchUp as well as interactive fly-over models that use Flash and other multimedia programs. Smaller cities may have a hard time staffing such efforts and may need to seek consultants.

Depending on the complexity of the existing code or size of the municipality, a code guide, code amendments or code rewrite could entail a substantial effort. Likewise, the benefits of using an interactive visual tool will also need to be offset by any concerns over the expenses involved. Google SketchUp software is relatively easy to learn and inexpensive. However, it is more effective when combined with other software, such as Photoshop for photorealistic models or Flash for video simulations. This addi-

tional software will cost more and require more extensive training. Using GIS data to develop SketchUp models also requires additional software and training. While it may take some time and resources to make these changes and build internal capability to use these tools, they improve the understanding and application of local codes, both internally and with the public.

Visioning: Combining 3-D techniques with an urban design plan can help create a compelling vision. Visual codes and guides can also be used to analyze parks and open spaces and the street network in terms of the larger urban regional framework. This includes looking at the transition of urban form from high-density centers and corridors to single-dwelling residential districts and to the rural edge, as well as analyzing the physical and visual linkages between spaces in relationship to the larger neighborhood or district context. Using these tools to better integrate different land use components, it sets the foundation for linking funds from different bureaus for public infrastructure investments.

Scale: In addition, when using any of the 3-D or video tools, views can be adjusted to provide different perspectives of future development such as a fly over perspective or a pedestrian perspective. Most examples of the 3-D video flyover tool, as it is currently used, are found within newer communities rather than in existing regional or town centers or corridors. However, the benefits of using this tool in infill areas are substantial: they can show the relationship between the proposed project and its surroundings and illustrate how new development will be integrated with existing buildings and open space. However, making sure proposals "fit" into an existing neighborhood requires more detailed design on a building-by-building level. This amount of design may not be feasible for a large study area.

Priorities: Using visual techniques can help communities define a clear vision for an area and identify compelling priorities for public investment. However, the priorities should not remain static if the market shifts dramatically. An example is allowing non-conforming building uses to redevelop as long as urban form, density or other objectives are largely met. Another example is allowing the jurisdiction to work with existing property owners to phase in improvements over time.

Development economics: The integration of visual and economic tools provides an interesting approach to evaluate the viability of infill and redevelopment. It also improves understanding among citizens, planners and decision makers regarding the correlation between zoning code requirements, real estate economics and project design. Financial feasibility for a project can change quickly with shifts in land values, construction costs, zoning requirements and other factors. A development economics analysis tied to the building prototype tool can test the financial feasibility of specific building types by integrating these different regulatory and market factors. As a result, codes can be modified to support desired development types that are also financially feasible.

Putting it together

New visual tools have proven extremely helpful in translating and amending existing codes, in more effectively involving the public, and in guiding infrastructure investments and improvements. Model approaches can better explain codes to developers and the general public and articulate a clear vision for future growth that can be rendered in built form. They visualize what types of buildings, streets and open spaces are desired and how these connect. They focus on the desired urban form and create design and development codes that support those development types. As a result, visual tools can enable well-designed compact, mixed-use development in the region's centers and corridors.

Tips for implementation

- Focus urban design plans in areas with existing capital improvement budgets and partner with other city departments and agencies.
- Engage members of the public and the government with visual tools.
- Use visual tools to lead broad, long-term visioning exercises to determine policies and regulations as well as to conduct analyses for specific proposals.
- Develop internal staff capability in software necessary to make use of visual tools.
- Make resulting visualizations accessible via the Internet to increase the public's access to tools and facilitate public outreach processes.
- Present products from these tools in accordance with their intended use; if they are being used as a tool to help guide the analysis and evolution of a potential project, do not make them look too finished.
- When possible, integrate economic and visual tools to provide information about the viability of projects.
- Consider developing guides with visual depictions and explanations of how local zoning is implemented to broaden awareness of the code as an interim step to rewriting or amending a code.
- Make sure any manuals and visualizations that are created are widely accessible in order to enhance their ability to inform the public, planning commissioners and developers.
- Prepare local staff for the implementation of any new codes and educate them in the new visual language and framework of the code.
- Consider hiring a town architect to help administer the more discretionary elements of a form-based code.

Resources

For more information on the example approaches, contact or visit:

City of Portland
Bureau of Planning
1900 SW Fourth Ave., Ste. 7100, Portland, OR 97201-5380
503-823-7700
Midtown Park Blocks Urban Design Plan
http://www.pdc.us/pdf/dev_serv/pubs/dev_midtown_planningstudy.pdf

City of Hillsboro
Planning Department
150 E. Main St., fourth floor, Hillsboro, OR 97123
503-681-6153
planning_dept@ci.hillsboro.or.us
http://www.southhillsboro.net/public.html

New York City Department of Planning, Central Office
22 Reade St., New York, NY 10007-1216
212-720-3300
http://www.tenant.net/Other_Laws/zoning/zontoc.html
http://www.nyc.gov/html/dcp/html/pub/zonehand.shtml

City of Petaluma
Planning Services
11 English St., Petaluma, CA 94952
707-778-4301
http://www.cityofpetaluma.net/cdd/cpsp.html

For more general information on form-based codes, visit:

http://www.smartcodecomplete.com/learn/links.html

http://www.formbasedcodes.org/

Community members at an open house workshop for the Redmond Downtown Development Plan, City of Redmond

Photograph provided by SERA

Toolkit

Innovative design and development codes

Involving neighborhoods

Innovative design and development codes administered by local governments do not alone create the most effective approach to developing better-designed centers and corridors and encouraging investment in these areas. Engaging neighborhoods in developing design and development codes that are supportive of new development with an urban form will increase the success of modified regulations and incentives in attracting development and achieving the region's vision. While government can sponsor these efforts, the grassroots, community-building nature of these programs seeks a non-governmental, non-regulatory approach. As one neighborhood activist framed the issue, "what is missing is the necessary social infrastructure to manage the amount of rapid growth and change that is happening here in the region."

The nuts and bolts

Just as local governments and developers need to visualize growth in order to make better decisions regarding investing and developing in centers and corridors, so do neighborhoods, and they need assistance from experts and professionals. Solutions include a referral service for developers and neighbors to examples of successful development, or a catalog of pictures and ideas of well-designed development in various communities. Educational programs can also help citizens visualize growth, understand the planning process and codes, and articulate their concerns in a constructive way.

When a development proposal turns controversial, neighborhoods and developers may benefit from a "rapid response team" to help neighbors and business owners contribute constructively before development pressures bring things to the boiling point, misunderstandings occur and participants are polarized. Trained facilitators and community design specialists can help by clearly communicating the code and helping the community sort out the local issues, implications and options. A combination of tools that involve neighborhoods will help engage these participants in a consistent and proactive way helping to reduce conflicts, minimize reactions to every development proposal and improve the design of new development.

How to use it:

Neighborhood grant program: A neighborhood fund or grant program offers a way for residents and business owners to become involved in local planning and development projects and contribute their skills through a short-term commitment. Local grant programs can be run out of a neighborhood involvement office or community development department. Through the program, the city matches a neighborhood or local organization's contribution of sweat equity, professional services, donated goods or cash. Requiring this match from the community ensures that proposed projects have the true support of neighborhoods. The organizations do not need to be incorporated and can simply be a group of neighbors. A program that is open to the public can promote creativity by encouraging not only new ideas, but also the participation of new organizations and new leadership from a range of diverse neighborhoods.

In developing a grant program, priorities and grant criteria need to be determined in order to select the types of projects that will be funded and how the program will be

Example approach

City of Seattle, Washington

Neighborhood grant program

Building off the City of Seattle's emphasis on participation and community empowerment, its Department of Neighborhoods developed the Neighborhood Matching Fund. The intent of the program was to go beyond involving citizens in the city's priorities and empower citizens instead to address their own priorities. Neighborhood organizations can apply for a grant on a competitive basis to match their contributions in cash, volunteer labor or donated goods and services.

The intent of the program was to go beyond involving citizens in the city's priorities and empower citizens instead to address their own priorities.

The grant program includes four different available funds, each of which targets a differently scaled project and provides a different level of funding over a specified amount of time. The funds provide money for neighborhood-initiated improvement, organizing or planning projects. For example, the now-famous Fremont Troll, which serves as a focal point for the local neighborhood, was built as a piece of public art with funds from the grant program. The Morgan Junction neighborhood was able to replant a ravine with native plants, bringing together the neighborhoods on either side of the ravine in the process and building advocacy for the area's ecology.

The Neighborhood Matching Fund has been surprisingly successful at what it set out to do: build community, both physically and socially. Not only are the projects transforming the physical appearance of the neighborhoods, but they are building a stronger sense of community by involving thousands of residents. The program has also yielded additional resources, numerous innovations and new partnerships between communities and city government.

The fund has enabled the city to more than double its investment while promoting projects that might not have been feasible otherwise. Since the fund's inception, more than 1,500 projects have been completed in nearly every Seattle neighborhood. Approximately 250 projects are funded each year. The fund has seen growth over the course of the program with its resources tripling to a total of $4.5 million per year.

The Neighborhood Matching Fund provides money for neighborhood-initiated improvement projects such as public art or park rennovations, City of Seattle

used. For example, programs can be developed to target a wide range of scales of projects by offering different levels of funding opportunities. If a city wants specific types of projects, it can establish different categories such as neighborhood planning or design projects, a physical improvement, a public school partnership, a race relations or social justice project, or a neighborhood climate protection fund. In addition to grants for neighborhood improvement projects, the program could also develop an awards program that gives grants to local neighborhood-based organizations to improve their capacity and capabilities. For example, a fund could help provide leadership training or technical assistance. Once the grant program determines the types and scales of the projects to be funded, different grant levels and the corresponding timelines for applications, funding awards and implementation of the projects can be set.

Such a fund can provide an effective means for residents to become involved in and positively influence the design and development of neighborhood improvement projects. These funding programs also increase the participation and cooperation among residents, businesses, public schools and the city. Each project is carried out in collaboration with the local government, and as a result, the departments involved can develop better relationships with the local neighborhoods. The program gives neighborhood organizations the resources they need to move from a reactive position to a more proactive and collaborative approach to development in and around their communities.

Existing use of the tool in the region: In this region, such a complete and ongoing neighborhood grant program has not been implemented. The City of Seattle implemented a neighborhood grants program that has been successful at engaging and empowering local communities. Since the program started it has funded over 1,500 projects in nearly every neighborhood in the city.

Urban design and planning classes: Seminars and training series can help citizens visualize growth and understand the planning process and associated codes. These educational programs can be organized by faculty as part of a university program; by professional planning, design and transportation organizations; or by non-profit advocacy groups. The best approach is to have at least one dedicated staff person or intern to coordinate the facilities, online resources, program outreach, announcements, speakers and topics. Likewise, secure funding for such a program improves its outreach capabilities and session development and coordination.

A significant effort is needed upfront to attract an audience to the events, but once a series is established it becomes easier to run. The organizer needs to solicit speakers, publicize the event, reach out to local organizations and leaders to build an audience, and oversee the event. The entire effort should involve minimal costs if time to manage the seminar is built into the organizer's workload and salary and if most speakers participate as volunteers. These low costs make it easier to offer the program to the public at no cost and to attract a broader audience.

Planning the sessions season-to-season is advantageous as it allows the program to be responsive to changing issues and the interests of the audience. Accessibility to the sessions through the Internet, as both live streams and archived videos, is also key to the success of current seminars and training series.

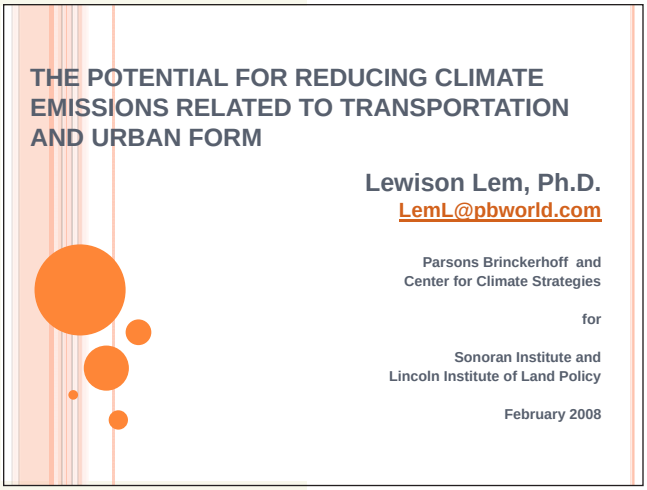
Example approach

Portland State University

Portland State University education series

Each term since 2002, the Center for Transportation Studies at Portland State University (PSU) has sponsored a weekly seminar series on transportation-related topics that is free and open to the public. On the seminar web site, one can access presentation materials and watch streaming video of the seminars or access audio podcasts. During the presentation, anyone watching online can participate in the forum in real time by sending questions via e-mail. Presenters include resident and visiting professors, consultants, city staff and staff of various transportation-related agencies at the state and local levels, covering topics such as managing parking issues in regional centers and updates on local planning initiatives. The free seminars, and the wide array of research presented, attract varied audiences including students, planning and engineering professionals, and interested members of the public.

Building off the transportation seminar, the Oregon Chapter of the American Planning Association (OAPA) has partnered with PSU to provide an ongoing training series for planning commissioners. Through these presentations, the OAPA provides information about planning to public officials as well as the public at large. The live and online formats are modeled after the transportation series with sessions free and open to the public and participation available through online streaming video. Planning commissioners who have participated in or viewed the sessions have offered positive feedback.



Images used at the transportation seminars at PSU

The nuts and bolts

Existing use of the tool in the region: Portland State University's (PSU) Center for Transportation Studies offers a weekly seminar on transportation-related topics. PSU's School of Urban Studies and Planning co-sponsors a seminar series with the Oregon Chapter of the American Planning Association (OAPA) to train local planning commissioners. Both of these resources can also be viewed online as both live stream and archived videos. The City Club of Portland offers a speaker series called Friday Forums, which is open to the public and available on public broadcasting stations, cable access programming and the City Club's web site. Compact discs and video cassettes are available for order as well.

Local governments and community organizations can utilize and support these currently operating programs rather than establishing their own programs. Local staff can take an active approach by recommending program topics and speakers and by working with PSU, OAPA, the City Club and other organizations in honing what outreach and what program format works best for their communities and audiences. Selecting which program to use is integral as each offers a unique approach to outreach with its own strengths and weaknesses. For example, the City Club reaches a statewide audience by broadcast on Oregon Public Broadcasting, but in doing so, limits the use of visual aids in the presentation. This could limit the discussions surrounding important planning issues and approaches as described in the visualizing zoning section.

TGM outreach and education program: Another education program available locally is the Transportation and Growth Management (TGM) Outreach and Education program. Through this program, the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development work with local governments to expand transportation choices while strengthening the economic vitality and livability of communities. Consulting services are typically provided through lectures, workshops and other public forums. The interactive workshops are flexible and are tailored to individual communities to address a variety of local transportation and land use issues.

Local governments throughout Oregon are eligible for TGM planning grants and community assistance services. These services are provided at no charge to local governments and are available to communities of any size. There is very little direct cost to participating communities beyond providing a location for the workshop, offering some staff support and publicizing the event. Thus, the program can provide a cheap and relatively fast alternative for addressing local design and development concerns.

Often cities seek funding and assistance from the program in response to anticipated or current development projects. Resulting presentations are designed to educate the general public, planning commissioners or city council members about key design considerations and opportunities within the current project that would improve the public realm and livability of the city. Many cities find that the outreach program serves as a good first step to introduce best practices and build knowledge of planning and smart growth principles.

In many instances the presentations have helped change votes in favor of mixed-use projects. The benefits of developing this knowledge base in the community can also have a long-lasting impact on community planning by building a constituency for high-quality design alternatives in the community.

Existing use of the tool in the region: Since 1997, more than 100 outreach workshops have been held across the state by TGM outreach services. They tend to emphasize services in smaller cities, but a number of TGM projects have also taken place in the Portland metro area. The Main Street Road Show, sponsored by the TGM outreach and education program, is oriented to smaller cities in more rural areas of the state. The region could consider a similar program focused specifically in this region in order to bring additional resources for outreach and design issues into centers, corridors and surrounding neighborhoods.

Keep in mind

Cumulative benefit: Programs that involve neighborhoods create more support for local planning efforts and development in these areas. Those programs that engage residents in specific projects create a sense of pride in the improvements and those people will feel invested and are likely to help maintain their projects long-term. Visible results from neighborhood projects can provide positive change and serve as the basis for future collaborative efforts. As a result, residents see positive change occurring within their neighborhood as opposed to negative perceptions associated with increases in density and development. Seeing visual results combined with more education in urban design and planning, communities may be more supportive of adopting innovative code approaches to achieving well-designed compact development in the region's centers and corridors.

Broader public outreach: These types of outreach programs can actually increase the number of people who are active in their communities and improve cooperation among residents, businesses and schools within the neighborhood. These established relationships will help serve as the basis for future collaborative efforts and may increase participation in local planning and design efforts.

It is important to involve a broad spectrum of neighborhoods and stakeholders in order to gain broad enough local support and investment in local planning and development efforts. It is also important to target specific neighborhoods in need of investment and assistance in encouraging local development. In order to do this, programs should include outreach efforts and technical assistance to educate local organizations and leaders about how to apply for and effectively use available technical assistance and funding programs. Education series and outreach programs can also engage a broader spectrum of individuals in wide-ranging locations by offering materials through the Internet and on DVD.

Putting it together

Engaging neighborhoods in the planning and development process can enhance the potential for success in implementing innovative regulations and incentives that attract investment in centers and corridors. Educational programs can help neighbors visualize growth, understand the planning process and codes, and articulate their concerns in a constructive way. A combination of tools that involve neighborhoods will help engage these participants in a consistent and proactive way, help reduce conflicts, improve the design of local developments and decrease barriers to compact development in centers and corridors. These educational and outreach tools offer effective methods for local governments, of varying sizes and resources, to implement.

Tips for implementation

- Select a program to partner with that best matches the outreach methods and goals of the local community and its needs.
- Partner with local or regional organizations that can provide unique resources for an educational program or series and can help make connections with a diverse range of individuals and practitioners.
- Consider partnering with a university to provide educational trainings as they have access to a comprehensive set of resources and face less stringent systems for format and performance measures than private firms or non-profit organizations.
- Consider funding outreach and marketing activities to attract a broad enough audience for educational efforts such as a seminar series.
- Contact planning commissioners, city staff, local civic organizations and neighborhood residents and business owners to attend the events and distribute materials.
- Produce videos, presentations and brochures to continue public outreach efforts after the public workshop or educational seminar is completed.
- Dedicate staff time and resources to follow up on tasks or work plans identified during an outreach or education program such as necessary code changes, implementation of design standards or capital improvement projects that increase pedestrian and bike safety.
- Use the TGM Outreach and Education program to address a current problem or challenge related to planning initiatives or development projects.

Resources

For more information on the example approaches, contact or visit:

Portland State University
School of Urban Studies and Planning
College of Urban and Public Affairs
PO Box 751
Portland, OR 97207
Center for Transportation Studies, transportation seminars
http://www.cts.pdx.edu/seminars.htm

City of Seattle
Department of Neighborhoods
Seattle Neighborhood Grant Program
206-684-CITY (2489)
http://www.seattle.gov/neighborhoods/nmf/

For information on additional education and outreach programs, contact or visit:

Oregon Chapter of the American Planning Association
Planning commissioner training
http://www.oregonapa.org/pageview.aspx?id=18208

Transportation and Land Use Connections: Outreach to Planning Commissioners
http://web.pdx.edu/~jdill/research.htm#TGM

Live and archived sessions for 2007-2008 season
http://media.pdx.edu/
(Click on 'Distance Learning Center Stream #3' on the left side)

Transportation and Growth Management (TGM) Outreach and Education
555 13th St., N.E.
Salem, OR 97301
503-986-4349

TGM Outreach and Education program
http://www.oregon.gov/LCD/TGM/outreach.shtml
Quick Response program
http://www.lcd.state.or.us/LCD/TGM/quickresponse.shtml

City Club of Portland
901 SW Washington St.
Portland, OR 97205
503-228-7231

Information on Friday Forums:
http://www.pdxcityclub.org/forums-events/friday-forums.php

About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy and good transportation choices for people and businesses in our region. Voters have asked Metro to help with the challenges that cross those lines and affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to protecting open space, caring for parks, planning for the best use of land, managing garbage disposal and increasing recycling. Metro oversees world-class facilities such as the Oregon Zoo, which contributes to conservation and education, and the Oregon Convention Center, which benefits the region's economy.

Your Metro representatives

Metro Council President
David Bragdon

Metro Councilors
Rod Park, District 1
Carlotta Collette, District 2
Carl Hosticka, District 3
Kathryn Harrington, District 4
Rex Burkholder, District 5
Robert Liberty, District 6

Auditor
Suzanne Flynn

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www.oregonmetro.gov

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